

THE JOURNAL
OF
HELLENIC STUDIES

THE SOCIETY FOR THE PROMOTION OF HELLENIC STUDIES

THE JOURNAL
OF
HELLENIC STUDIES

VOLUME XXIII. (1903)

KRAUS REPRINT

Nendeln/Liechtenstein

1972

Reprinted by permission of
THE SOCIETY FOR THE PROMOTION OF HELLENIC STUDIES

KRAUS REPRINT

A Division of
KRAUS-THOMSON ORGANIZATION LIMITED
Nendeln/Liechtenstein

1972

Printed in Germany
Lessingdruckerei Wiesbaden

CONTENTS.

	PAGE
Rules of the Society	ix
List of Officers and Members	xv
Proceedings of the Society, 1901-1902	xxxvii
Additions to the Library	liii
Notice to Contributors	lv
DAWKINS (R. M.)... .. Pottery from Zakro	248
DENT (E. J.) Mr. Headlam's Theory of Greek Lyric Metre	71
DICKINS (G.) Some Points with regard to the Homeric House	325
FROST (K. T.) The Statues from Cerigotto [Plates VIII., IX.]	217
GARDINER (E. N.) The Method of Deciding the Pentathlon ...	54
" " Notes on the Greek Foot Race	261
GARDNER (E. A.)... .. The Bronze Statue from Cerigotto [Plates VIII., IX.]	152
GARDNER (P.) Two Heads of Apollo [Plate III.]	117
GOODSPEED (E. J.) Alexandrian Hexameter Fragments [Plate X.]	237
HARRISON (J. E.)... .. Mystica Vannus Iacchi	292
HASLUCK (F. W.) Inscriptions from Cyzicus	75
HIRST (G. M.) The Cults of Olbia (Part II.)	24
LORIMER (H. L.) The Country Cart of Ancient Greece	132
MACDONALD (G.) Early Seleucid Portraits [Plates I., II.] ...	92
MACKENZIE (D.) The Pottery of Knossos [Plates IV.-VII.] ...	157
STRONG (E.) Three Sculptured Stelai [Plates XI.-XIII.] ...	356
WACE (A. J. B.) Recent Excavations in Asia Minor	335
WILLIAMS (T. H.) Theognis and his Poems	1
Notices of Books	206, 360
Index of Subjects	369
Greek Index	374
List of Books Noticed	376

LIST OF PLATES.

- I., II. Early Seleucid Portraits.
- III. The Oldfield Head of Apollo.
- IV. Neolithic Ware from Knossos.
- V. Minoan Cups from Knossos.
- VI., VII. Minoan Pottery from Knossos.
- VIII. Head of Bronze from Cerigotto.
- IX. Bronze Statue from Cerigotto.
- X. Alexandrian Hexameter Fragment.
- XI. Stele of Melisto and Epigenes.
- XII. Stele of Arkesis.
- XIII. Stele of an Actor.

LIST OF ILLUSTRATIONS IN THE TEXT.

	PAGE
Bronze Coins of Olbia in the British Museum	33, 34
" " " " Berlin Museum	42, 51
Inscriptions from Cyzicus	78
Relief of Timolaus and Dionysius from Cyzicus	79
" Asclepias	81
" Aur. Apollodorus	84
Stele of Apollo from Cyzicus	88
The Pourtales Head of Apollo	118
The Oldfield Head of Apollo	119
Head from the Mausoleum	122
The same with Shoulder	125
Statue of Agias from Delphi	129
The Lansdowne Heracles	129
Pyxis at Athens (Wedding Scenes)	133
Relief in Villa Albani (Silenus and Priapus on Cart)	134
Scene from a Cabeiric Vase (Wedding Procession)... ..	137
" " " " (Wine-cart)	138
Corinthian Pinax at Berlin (Chariot)	139
From a Chalcidian Vase in Brit. Mus. (Farm cart)	139
Terracotta from Cyprus at Athens (Country-cart)	140
From R.F. Amphora at Munich (Travelling-cart)	142
Wooden Wheels from Mercurago	146
Pottery of Knossos 167, 175-178, 180, 186, 189, 191-193, 195-198,	204
Polycleiton Statuette from Cerigotto	222
Statuette of Hermes	226
Marble Figure	231
Portrait of a Philosopher	233
Pottery from Zikro	249-259
Greek Foot Race: R.F. Amphora in the Louvre	270
" " " R.F. Kylix formerly at Naples... ..	271
" " " Pelike belonging to Dr. Hauser	272
" " " R.F. Kylix, Munich	272
" " " " " in B.M. (E 6)... ..	273
" " " " " Berlin	277
" " " Euphronius Kylix, Paris	278
" " " R.F. Kylix, formerly at Berlin... ..	278
" " " Reconstruction of the Armed Race	279
" " " Bourguignon Skyphos... ..	283
" " " R.F. Kylix, Munich	284
" " " " " in B.M. (E 818)	285

	PAGE
Greek Foot Race: R.F. Kylix, in B.M. (E 78)	285
" " " " " Cambridge	286
" " " " " in B.M. (E 22)	288
Hermes in the Liknon (R.F. Kylix)... ..	294
Coins of Nicaea and Hadriani in the B.M.	295
Child in Liknon (Terracotta plaque in B.M.)	295
" " (Pashley Sarcophagus)	296
Liknon with First fruits (Relief in Louvre)	297
" erected (Relief in Munich)	298
Modern Winnowing 'Fan' from France	299
Winnowing 'Fan' in use	300
Cretan <i>θυρνάκι</i>	303
Winnowing Implements in use in Finland	309
Brass of Sir Robert de Setvans (Chartham)	312
The Liknon in use in Eleusinian Mysteries (Urn at Rome)	313
Carrying of Likna at Marriage Procession (B.F. Vase in B.M., B 174)	315
Liknon and Dionysiac Mask (Verona)	318
Disk in Fitzwilliam Museum	319
Stucco Relief (Museo delle Terme)	321
Blue glass amphora (Florence)	322
Plan of the Homeric House	326
The Palace at Tiryns	326
Plans of Houses at Cnossus	327
" " " Phylakopi	327
" Palace at Mycenae	327
Pergamum: Plan of Excavations	337
" Entrance to Second Gymnasium Terrace	339
Ephesus: Plan	340
" Restoration of Hellenistic Gate	342
" " Roman Entrance	343
" Plan of Western End of Lysimachean Wall	344
" Restoration of Round Monument	345
" Bronze athlete	346
" Bronze lampstand	347
" Marble female head	348
" Male portrait head as Hermes... ..	348
" Boy with duck	348
" Head of goddess with diadem	348
" Portrait bust of priest	349
" Panels of frieze of Hunting Erotes... ..	349, 350
" Amazon relief	350
Miletus: Plan	351
" West End of Stage Building	353
" Southern Gate	354

THEOGNIS AND HIS POEMS.

I.

Theognis, Theagenes, and Megara.

THE collection of elegiac poems which bears the name of Theognis offers one of the most interesting problems in the literary history of Greece, and, in spite of many tentative solutions, it must be admitted that the origin and composition of this anthology still remain a mystery. We know that the Theognidea include poems composed by Tyrtaeus, Mimnermus, and Solon, and it is therefore by no means unlikely that they also include a great number of other elegies that can no longer be traced to their proper sources. As the object of the following article is to discuss a few points connected with the poet's life and political surroundings, we must first of all discover some test which will enable us to distinguish the genuine poems of Theognis from those of other poets represented in the collection. We can safely assume that Theognis is the author of all the elegies in Book I. which contain the name of Cynos, the young noble to whom the poet addressed so many of his didactic and political poems. For the name of Cynos is the *σφρηγίς*¹ referred to by the poet in elegy 19-26, as something which will lead to the detection of the theft, if the poems are stolen. The *σφρηγίς* cannot, as some suppose, be the name of the poet himself: the mere insertion of the name of Theognis at the beginning or end of a collection of disconnected poems would afford no protection against plagiarism. What was wanted was a mark attached to each poem, and it is to serve this purpose that the vocative *Κύνε* is so frequently introduced.²

¹ 19 Κύνη, σοφισμένῃ μὲν ἐμοὶ σφρηγὶς ἐπικείσθω
τοῖσδ' ἔπαισι, λήσει δ' οὔποτε κλειπτόμενα,
οὔδ' ἐτις ἀλλὰ ξείν' ἐκείνου τοῦσθλοῦ παρέντος·
ὦδε δ' ἐπὶ πᾶσι τίς ἐρεῖ: 'Θεογνιδὸς ἐστὶν ἔπη

τοῦ Μεγαρέος· πάντας δὲ κατ' ἀνθρώπους
ὀνομαστός.'
ἀστοῖσιν δ' οὔπω πᾶσιν ἄδειν δύναμαι·
οὔδ' ἐν θαυμαστόν, Πολυταίδη· οὔδ' ἄρ' ὁ
Ζεὺς
οὔθ' ὅν' πάντεςσ' ἀνδάνει οὔτ' ἀνέχων

² It occurs over 75 times.

Sitzler in his edition of Theognis certainly goes too far when he rejects almost every poem that does not bear this 'seal': for an elegy may often be a mere fragment, and we need not suppose that Theognis affixed the 'seal' to all the poems he ever composed. But as material to illustrate the poet's life the remaining poems in the collection must be used with the greatest caution, and mere occurrence in the collection should never induce us to accept a poem as genuine.

Outside the Theognidea, we have no trustworthy information about the poet himself, and every reference to him in the works of ancient writers has been the subject of violent controversy. The ancients could not agree even on the question of his home and birthplace. In v. 23 he calls himself 'Theognis the Megarian.' The poems contain such clear references³ to the Nisaeon Megara on the Isthmus of Corinth that most modern scholars agree in regarding Theognis as a native of that town. The ancients, it is true, were divided in their opinions, and many preferred the claims of Megara in Sicily. The latter had the support of Plato, who⁴ refers to Theognis as *πολίτην τῶν ἐν Σικελίᾳ Μεγαρέων*: in spite of many ingenious suggestions⁵

³ *Μεγαρεύς* 'without an adjective' naturally means 'a native of the Megara' and no one will deny the claim of Nisaeon Megara to that distinction.

The political situation described in the Theognidea corresponds closely with the accounts of Megara given by Aristotle and Plutarch. Many expressions in the poems undoubtedly refer to Nisaeon Megara, but we cannot be always certain that Theognis is the author of the poems in question.

The opening couplet of elegy 773-782 contains a reference to continental Megara, and its patron Apollo.

Φοῖβε ἀναξ, αὐτὸς μὲν ἐπύργωσας πόλιν ἄκρην,
'Αλκαθόφ Πέλοπος παιδὶ χαριζόμενος.

For we know that Apollo helped Alcathous to rebuild the walls of Megara; and one of the town's citadels bears the name of Alcathous. (Paus. i. 42). Alcathous is said to have dedicated a temple to 'Απόλλων ἀγραῖος and 'Αρτεμις ἀγροτέρα (Paus. i. 41). The opening poems of the collection are addressed to deities especially connected with Megara, viz. Apollo and Artemis, who figure prominently on the bronze and silver coins of the state.

⁴ Laws. 629 a.

'Αθ. προστησώμεθα γοῦν Τύρταιον, τὸν φύσει μὲν Ἀθηναῖον, τῶνδε δὲ πολίτην γενόμενον. . .

630 'Αθ. 'Ημεῖς δὲ γε ἀγαθῶν ὄντων τούτων ἔτι φαιμέν ἀμείνους εἶναι καὶ πολὺ τοὺς ἐν τῷ μεγίστῳ πολέμῳ γιγνομένους ἀρίστους διαφανῶς ποιητὴν δὲ καὶ ἡμεῖς μάρτυρα ἔχομεν, Θέογιον, πολίτην τῶν ἐν Σικελίᾳ Μεγαρέων.

⁵ Most modern critics endeavour to remove the

difficulty by accepting the suggestion of a scholiast (quoted by Sitzler, Theognidis Reliquiae, addenda to p. 49) *τί δὲ ἐκώλυεν αὐτὸν ἐκ ταύτης μὲν εἶναι τῆς Μεγαρίδος, ἀπελθόντα δὲ εἰς Σικελίαν, ὡς ἡ ἱστορία ἔχει, γενέσθαι νόμῳ Μεγαρέα ἐκεῖ, ὡς καὶ τὸν Τυρταῖον Λακεδαιμόνιον*; Plato, they say, knew that Theognis was a native of Nisaeon Megara, and in the passage under discussion he tells us that the poet had received the franchise in the Sicilian city. Had Plato meant this, he would surely have added the word *γενόμενον* to *πολίτην* (as in the case of Tyrtaeus). Welcker (followed by Sitzler) removes the difficulty by assuming that in the above quotation from the Laws the words *καὶ ἡμεῖς* mean 'we inhabitants of Attica.' This would certainly make everything clear, but such a translation is quite impossible. Although the speaker is an Athenian, *καὶ ἡμεῖς* (like *ἡμεῖς δὲ* two lines earlier) can only mean 'we, and those who agree with us on this point,' 'we who differ from Tyrtaeus in our views can also bring forward a poet in support of our opinions.' Theognis is not brought upon the stage as a native of Attica to meet Tyrtaeus the Spartan. Such a contrast is out of question here. Not only would it be irrelevant and out of place, but Tyrtaeus himself has at the very outset been claimed not merely as a native of Attica, but as an Athenian. The two poets are introduced to represent not two districts but two shades of opinion on the question at issue, viz. the respective merits of *στάσις* and *δ* *ἐξωθεν πόλεμος* as tests of a man's good qualities.

it is impossible to reconcile conflicting statements by explaining these words away, and we must admit that Plato looked upon Sicilian Megara as the home of our poet. But the protests of the ancients⁶ and the testimony of the poems themselves justify us in rejecting the philosopher's statement and accepting the claims of continental Megara on the borders of Attica. So strong is the evidence in support of this view that even the two German critics⁷ who refuse to regard Nisaeon Megara as the home and birthplace of the poet, have found themselves compelled to connect him with that town, and to admit that at least part of his life was spent there.

We must next discuss the question of date. In elegy⁸ 53-60 Theognis deals with the changes in the political situation, and informs us that sovereign power had been taken away from the 'good' i.e. the nobles, and passed into the hands of the 'low,' 'those who before knew not suits or laws, but wore out with their sides the skins of goats, and like stags dwelt outside the city.' This is a reference to the introduction of democracy at Megara: to fix its date we have but very scanty materials at our disposal, but we may still arrive at a fair degree of certainty by examining the statements of Theognis himself and the stray bits of evidence we may gather from the works of Aristotle and Plutarch. We must start with the reign of Theagenes, who raised himself to power by the means commonly adopted by all aspirants to tyranny in those days.⁹ Posing as the champion of the poor, he attacked the rich landlords who, it would appear, had occupied a particularly fertile tract of land near the river, and there he slaughtered their cattle. With the help of a body-guard furnished by the people¹⁰ he made himself tyrant, and seems, for a time at least, to have been a most successful ruler. How long he ruled we do not know, but we do know that he was already tyrant when his son-in-law Cylon, with the help of a body of mercenaries sent over from Megara, seized the Acropolis at Athens and endeavoured to make himself master of the city. During his rule Theagenes adorned the city with works of public utility.¹¹ His reign cannot have been a long one. Plutarch (*Qu. Graecae*, 18)¹² tells us that the tyrant was expelled by the people of Megara; some¹³ scholars have assumed that the cause of his expulsion was his failure to prevent Salamis falling into the hands of the

⁶ e.g. Didymus, cf. Schol. ad Plat. legg. 630 (quoted by Sitzler) οὕτως δ' Δίδυμος, ἐπιφύμενος τῷ Πλάτῳ ὡς παριστοροῦντι: and Harpocration: οὗτος δ' ἦν Μεγαρεὺς ἀπὸ τῶν πρὸς τῇ Ἀττικῇ Μεγάρων· αὐτὸς γὰρ φησιν ὁ ποιητὴς· ἦλθον μὲν γὰρ ἔγωγε καὶ ἐς Σικελίην ποτε γαῖαν (*Theog.* 783).

⁷ G. F. Unger ('Die Heimat von Theognis,' *Philologus* 45) takes the poet to be a native of a Megara on the borders of Macedonia and Epirus, and a member of the tribe Αἰθίκες (cf. *Theog.* 1209).

J. Beloch (*Neue Jahrb. f. Phil. u. Päd.* 1888) accepts the view of Plato, chiefly on account of

the reference to cavalry in *Theog.* 519-554. 'Das griechische Megara hat so wenig wie der ganze Peloponnes bis an das Ende des 5ten. Jh. eine Reiterei unterhalten.'

⁸ Quoted in full below, n. 41. My quotations are taken from Bergk-Hiller-Crusius *Anthologia Lyrica*, 1897 (= B.H.C.) *Theognis*, pp. 67-122.

⁹ Aristotle, *Pol.* 1305 a.

¹⁰ Aristotle, 1357 b. ἤτει φυλακὴν καὶ λαβὼν ἐτυράννευσε.

¹¹ Pausanias, 1. 40.

¹² Quoted below, n. 16.

¹³ e.g. Bergk, *Griech. Literaturgeschichte* ii. p. 305.

Athenians when they attacked the island at the instigation of Solon. As the capture of Salamis can hardly have occurred before 600 B.C., we must reject the above suggestion, for it would give Theagenes a reign of at least ¹⁴ twenty-five years, in which case his name would certainly have been inserted by Aristotle in his list of long tyrannies, since the fourth place on the list is held by the tyranny of Hieron and Gelon, which lasted only eighteen years (including the reigns of the *two* tyrants).¹⁵ The reign of Theagenes must then have been a short one, and we shall not be far wrong if we reduce its duration to five or six years.

Plutarch¹⁶ tells us that after expelling Theagenes the Megarians enjoyed a short period of 'moderate' government, and afterwards, under the leadership of demagogues 'who gave the people copious draughts of the wine of freedom,' became thoroughly corrupt and violent towards the rich, entering their houses and treating themselves to sumptuous banquets at their expense. Finally they passed a measure compelling the money-lenders to return the interest they had exacted. In another passage (*Qu. Gr.* 59) we find a reference to an incident in the history of this same democracy which the author refers to as *ἡ ἀκόλαστος δημοκρατία, ἥ καὶ τὴν παλιντοκίαν ἐποίησε καὶ τὴν ἱεροσυλίαν*. Then follows an account of an act of violence committed by *τῶν Μεγαρέων οἱ θρασύτατοι μεθυσθέντες*, who, *ὑβρεῖ καὶ ὤμότητι*, assaulted a *θεωρία Πελοποννησίων*. As the state neglected to punish the authors of this act of veritable Hooliganism,¹⁷ the Amphictyons interfered and punished the 'accursed' citizens, some of whom were put to death and others driven into exile.¹⁸ The conduct of this democracy is characterized by the same expressions in the two passages of the *Quaestiones Graecae*; its features are *ἀσέλγεια*, *ὑβρις*, *ὤμότης* and *ἀταξία*; it afforded the stock instance of democratic lawlessness at Megara, and it is distinguished from all others by the epithet *ἀκόλαστος*.

If, in other Greek authors who deal with the fortunes of Megara, we find references to a democracy in which prominence is given to the violence and lawlessness of the commons, we shall, unless it is otherwise stated, not be wrong in assuming that the one referred to by Plutarch is meant.

¹⁴ i.e. if we accept 624 B.C. as the latest date possible for the attempt of Cylon.

¹⁵ Aristotle, 1315 b. *τῶν δὲ λοιπῶν ἢ (τῶν) περὶ Ἰέρωνα καὶ Γέλωνα περὶ Συρακούσας. ἔτη δ' οὐδ' αὕτη πολλὰ διέμεινεν, ἀλλὰ τὰ σύμπαντα θυεῖν δέοντα εἴκοσι. Γέλων μὲν γὰρ ἑπτὰ τυραννεύσας γὰρ ὑγρόφ τὸν βίον ἐτελεύτησεν, δέκα δ' Ἰέρων, Θρασύβουλος δὲ τῷ ἑνδεκάτῳ μηνὶ ἐξέπεσεν. αἱ δὲ πολλὰ τῶν τυραννίδων ὀλιγοχρόνιαι πᾶσαι γεγενῆσιν παντελῶς.*

¹⁶ *Quaestiones Graecae*, 18.

Μεγαρεῖς Θεαγένῃ, τὸν τύραννον, ἐκβαλόντες, ὀλίγον χρόνον ἐσωφρόνησαν κατὰ τὴν πολιτείαν· εἴτα πολλὴν—κατὰ Πλάτωνα—καὶ ἄκρατον αὐτοῖς

ἐλευθερίαν τῶν δημαγωγῶν οἰνοχοούντων, διαφθαρίντες παντάπασιν, τὰ τε ἄλλα τοῖς πλουσίοις ἀσελγῶς προσεφέρνουν, καὶ παριόντες εἰς τὰς οἰκίας αὐτῶν οἱ πένητες ἤξιον ἐσιτῆσθαι καὶ δειπνεῖν πολυτελῶς· εἰ δὲ μὴ τυγχάνοιεν, πρὸς βίαν καὶ μεθ' ὑβρεως ἐχρῶντο πᾶσι. Τέλος δὲ δόγμα θέμενοι, τοὺς τόκους ἀνεπράττοντο παρὰ τῶν δανειστῶν, οὓς δεδωκότες ἐτύγχανον, παλιντοκίαν τὸ γινόμενον προσαγορεύσαντες.

¹⁷ οἱ μὲν Μεγαρεῖς δι' ἀταξίαν τῆς πολιτείας ἡμέλησαν τοῦ ἀδικήματος.

¹⁸ As Athens had her *σεισάχθεια* and τὸ ἄγος so Megara had her *παλιντοκία* and οἱ ἐναγεῖς.

For further light on the subject we must go to the Politics of Aristotle,¹⁹ 1304b. παραπλησίως ²⁰ δὲ καὶ ἡ ἐν Μεγάρῳις κατελύθη δημοκρατία· οἱ γὰρ δημαγωγοί, ἵνα χρήματα ἔχωσι δημεύειν, ἐξέβαλλον πολλοὺς τῶν γνωρίμων, ἕως πολλοὺς ἐποίησαν τοὺς φεύγοντας, οἱ δὲ κατιόντες ἐνίκησαν μαχόμενοι τὸν δῆμον καὶ κατέστησαν τὴν ὀλιγαρχίαν.

1302 b. ἐν ταῖς δημοκρατίαις [στασιάζουσιν] οἱ εὖποροι καταφρονήσαντες τῆς ἀταξίας καὶ ἀναρχίας, ὅλον καὶ ἐν Θήβαις μετὰ τὴν ἐν Οἰνοφύτοις μάχην κακῶς πολιτευομένοις ἡ δημοκρατία διεφθάρη, καὶ ἡ Μεγαρέων δι' ἀταξίαν καὶ ἀναρχίαν ἡττηθέντων, καὶ ἐν Συρακούσαις πρὸ τῆς Γέλωνος τυραννίδος, καὶ ἐν Ῥόδῳ ὁ δῆμος πρὸ τῆς ἐπαναστάσεως.

The characteristics of this Megarian democracy are exactly those given by Plutarch: if Aristotle had not the ἀκόλαστος δημοκρατία in mind when he was talking of ἀσέλγεια, ἀταξία, ἀναρχία, and confiscations, he would surely have said so, especially as in the very same passage he is so careful to specify the other examples he adduces, e.g., ἐν Θήβαις μετὰ τὴν κτλ; there was no need of further description in the case of Megara, as the reference was at once plain to all.²¹ We gather from Plutarch that democracy was established after a *short period* of 'moderate' government subsequent to the expulsion of Theagenes. A sentence in the Poetics of Aristotle (ch. 3:3) may give us further help in fixing the date.²² The Megarians, we are told, claim comedy as their own, dating its invention ἐπὶ τῆς παρ' αὐτοῖς δημοκρατίας.

The Parian marble (B.C. 264—3)²³ tells us that the people of Icaria instituted competitions in comedy at a date somewhere between 581 and 562²⁴: Susarion is referred to as the 'inventor.' Whether the above statement is correct or not, we can certainly draw the following conclusions. People living less than sixty years after Aristotle²⁵ believed that comedies were performed in Attica before 562 B.C. In the time of Aristotle (without

¹⁹ The ancients attributed a Μεγαρέων πολιτεία to Aristotle. Strabo, lib. vii. 7 αἱ Ἀριστοτέλους πολιτεῖαι δηλοῦσιν . . . φησὶ . . . ἐν τῇ Ὀπουντίῳ καὶ Μεγαρέων.

²⁰ παραπλησίως refers to the preceding instances of the statement made at the beginning of the chapter, viz. αἱ μὲν οὖν δημοκρατίαι μάλιστα μεταβάλλουσι διὰ τὴν τῶν δημαγωγῶν ἀσέλγειαν.

²¹ Another passage in the Politics probably refers to the overthrow of this democracy: 1300 a περὶ τὰς τῶν ἀρχῶν καταστάσεις . . . ὥσπερ ἐν Μεγάρῳις ἐκ τῶν συγκατελθόντων καὶ συμμαχεσάμενων πρὸς τὸν δῆμον. Some (e.g. Cauer) refer 1300 a, 1302 b, and 1304 b to the return of the exiles narrated in *Thuc.* iv. 74, but as Welcker pointed out in his *Prolegomena* to *Theognis* (p. xii) this is impossible owing to the words ἐνίκησαν μαχόμενοι, ἡττηθέντων and συμμαχεσάμενων: for the exiles of 424 did not secure their restoration by defeating their

opponents in battle but returned under an agreement (κοινολογησάμενοι κατὰ γουσι).

²² τῆς μὲν κωμῳδίας (ἀντιποιοῦνται) οἱ Μεγαρεῖς, οἱ τε ἐνταῦθα, ὡς ἐπὶ τῆς παρ' αὐτοῖς δημοκρατίας γενομένης, καὶ οἱ ἐκ Σικελίας.

²³ Flach, *Chronicon Parium*, 1884, Christ 'Gr. Litt.-Gesch.' in Müller's *Handbuch*, vol. vii. ed. 3, 1898, p. 557.

²⁴ There was a definite date engraved on the marble, but it is no longer legible. The entry comes in between the archonship of Damasias and the tyranny of Pisistratus: Flach, p. 18, § 39 ἀφ' οὗ ἐν Ἀθ[ήν]αις κωμῳ[δ]ῶν χο[ρ]ὸς ἡύρ[ε]θη [σση]σάν[των αὐτῶν] τῶν Ἰκαριέων, εὐρύντος Σουσarıννος, καὶ ἄθλον ἐτέθη πρῶτον ἰσχαδῶ[ν] ἔρσιχο[ν] καὶ οἶνον [ἀμφορ]ε[ύς].

Bergk reads ἐν ἀμῳαῖς κωμῳδία ἡύρεθη *Gr. Litt.-Gesch.* iv. p. 43.

²⁵ Some think that the compiler of the chronicle derived his information from a pupil of Aristotle.

being contradicted by him) the people of Megara claimed the invention of comedy. They would not be able to get anyone to listen to their claim unless they asserted that comedies were performed at Megara at a date previous to the popularly accepted date of the Icarian contests and the appearance of Susarion: whether they claimed him as a Megarian or not is a question which does not concern us here.²⁶

The date they gave was ἐπὶ τῆς παρ' αὐτοῖς δημοκρατίας. So this democracy must have been established at least before 570 B.C., probably a good many years earlier. What happened at Megara after the restoration of the oligarchy must remain a matter of conjecture. Welcker assumes that the commons again made themselves masters of the state and set up a democracy which remained in power till Olymp 89. 1.²⁷ But this theory must be modified, as Thucydides closes his account of the changes at Megara (424 B.C.) with the words: καὶ πλείσταν δὴ χρόνον αὕτη ὑπ' ἐλαχίστων γενομένη ἐκ στάσεως μετὰστασις ξυνέμεινεν. As this must have been written before 396 B.C. (the probable date of the historian's death), the oligarchy of 424 must have broken the record when they had been considerably less than thirty years in power. We can therefore safely assume that political power at Megara changed hands several times in the interval assigned by Welcker to democracy alone.

Poems which undoubtedly belong to Theognis contain references to a state of things parallel to that described by Plutarch and Aristotle, and it can be proved that he wrote poems addressed to his young friend Cynrus soon after the democratic revolution.²⁸ In announcing his intention of writing poems for the special benefit of Cynrus, Theognis assumes the tone of a man who has wide experience and talks to his young protégé like a father.²⁹ We can infer that the age of the poet at the time of the democratic revolution was at least thirty.

Although the elegy 773-782 does not bear the σφρηγὶς we need not hesitate to accept it as genuine, for the mention³⁰ of the god Phoebus building the citadel for Alcaëus proves conclusively that the poem is the work of a Megarian and besides Theognis we know of no Megarian poet who could have written it. It is a prayer addressed to Apollo entreating him 'to keep the wanton horde of the Medes away from our town.' We have seen that Theognis was born before the close of the seventh century; so the references in the above lines cannot be to the Persian invasions of 490 or 480 B.C., but

²⁶ Aristotle does not mention him.

²⁷ Welcker, *Proleg.* xii. 'Plebs postea denuo superior facta est, quum Ol. 89. 1. ex democratia iterum paucorum dominatum restitutum esse constet ex Thucyd. iv. 74; cf. v. 31'; also xiii. 'popularis status qui ad Ol. 89. 1. usque tenuit.' Cf. St. Hilaire in a note to ch. iii. 3 of his translation of Aristotle's *Poetics* (1858): 'cette démocratie dura sans doute jusqu'à la guerre du Péloponnèse: du moins Thucydide, livre iv. ch. 74. parle-t-il de la révolution

oligarchique qui renversa le gouvernement de Megara' Cf. F. G. Schneidewin, *Delectus Poet. Eleg. Græc.* (1838), p. 54, 'quum principatus nobilium denuo popularibus turbis cessisset: qui status ad Olymp. 89. 1. usque obtinuit.'

²⁸ This is discussed in detail below.

²⁹ *Theog.* 27-30.

³⁰ Φοῖβε ἄναξ, αὐτὸς μὲν ἐπύργωσας πόλιν ἄκρην,

Ἀλκαθόφ Πέλοπος παιδί χαρίζόμενος.

to the terror caused by the sudden appearance of Cyrus and by his conquests in Asia, when some of the Asiatic Greeks had to flee from their homes and seek a refuge across the sea.³¹ The general tone of this elegy, as well as of 757-768 (probably written by the same poet),³² is much better suited to the circumstances of 545 B.C. than the years of actual fighting with a Persian army in Greece itself. The language used does not suggest a present danger, but rather a cloud looming on the horizon, the fear of an invasion made possible by the want of agreement among the Greeks themselves. Instead of calling his fellow citizens to arms and arousing their martial ardour, the poet urges them to drink and be merry, and not to fret about the Persians. The care of the city he is quite willing to leave to the gods. According to our calculations the age of Theognis would be about sixty in the year 545 B.C., and this accords very well with his prayer (in vv. 767, 8) that 'hateful old age' should be kept away from him. The dates we have arrived at agree with those given by ancient grammarians and chronologists who place the poet's floruit at Ol. 59-57, e.g. Hieron: Ol. 59, 1, Chronic. Pasch. Ol. 57, Suidas γεγονὼς ἐν τῇ νθ' Ὀλυμπιάδι.³³

Many attempts have been made to reconstruct the political history of Megara during the first half of the sixth century before Christ: the most detailed is that of Cauer.³⁴ Starting with the poems of Theognis, he distinguishes two periods in the political life of the poet, of which he gives the following account. Though an aristocrat by birth, Theognis entered the political arena as a member of the middle-class party which included men of low birth who had enriched themselves by trade and manufacturing industry: among them were many mechanics and especially armourers. This party Cauer refers to as the '*Handwerkerstand*.' He traces the fortunes of this industrial class up to the time immediately preceding the tyranny of Theagenes (about 630) when their extreme poverty had driven them to seek a remedy in revolution. It was mainly by their help that the tyrant raised himself to power, and they derived the greatest benefits from his rule, for the only

³¹ Cf. the threat of Cyrus, *Herod.* i. 153 τοῖσι, ἣν ἐγὼ ὑγιαίνω, οὐ τὰ Ἴωνων πάθεα ἔσται ἔλλεσχα ἀλλὰ τὰ οἰκήτῃα.

³² Herzberg attributes it to Xenophanes, cf. Sitzler, *Theognidis Reliquiae*, p. 36, note 64 a.

³³ *Theog.* vv. 891-4 are taken by Christ (*Gr. Litt.-Gesch.* p. 131) to refer to the Athenian expedition under the Cypselid Miltiades in the year 506 B.C., and are used as an argument in favour of a later date for Theognis (757 sqq., 773 sqq., refer to the expedition of Mardonius 492 B.C.). But there is no good ground for attributing the elegy (891-4) to Theognis, nor is the reference so clear as Christ would have us believe. Beloch, in the article referred to above (note 7), states his belief that Megara had passed through the social revolution (seine grosse Revolution, sein 1789) at the end of the

seventh century B.C.; and this is one of his reasons for refusing to regard Theognis as a native of Megara Nisaea. He tacitly admits that if this Megara was the home of Theognis, the poet must have lived at the end of the seventh century. His interpretation of 773-782, which he takes to refer to the events of the year 480 B.C., compels him to reject this early date; and he considers that the political elegies refer to the struggles between the nobles and the people in Sicilian Megara, as the other Megara had passed through the same crisis more than a century before.

³⁴ *Parteien und Politiker in Megara und Athen*, von Friedrich Cauer, Stuttgart, 1890, cf. F. Cauer, *Studien zu Theognis in Philologus* 18, 49, 50.

record we have of his reign refers to a step taken in their interests.³⁵ The fall of the tyrant was a great blow to the party; they failed to hold their own against the nobility, and lost all the privileges they had won. The nobles were still at the head of the state when Theognis began to write.³⁶ In the poems that belong to this period he refers to the members of his party as citizens (*ἄστροι*): the nobles he calls *ἡγεμόνες*. In elegy 39-42 he praises his own comrades, the *ἄστροι*, addresses a solemn warning to the *ἡγεμόνες* and expresses his fear that the conduct of the latter will lead to a tyranny.³⁷ After this, Theognis quarrelled with his political friends and went over to the aristocracy, whose cause he took up with the greatest enthusiasm. Henceforth he appears as the mouthpiece of the most exclusive caste-feeling, his old companions are to him no longer 'citizens,' but the 'bad,' *οἱ κακοί*, for that is the name he now applies to them. He speaks of them in tones of bitter hatred and advises his young friend not to associate with them or attend their gatherings (*c.g.* vv. 31-36). The nobles were still in power when the poet changed sides.³⁸ The expenses of the war with Athens and the loss of Salamis almost ruined the nobles; for as the industrial class was not called upon to defend the state against her enemies,³⁹ the brunt of the fighting fell on the aristocracy, their land was laid waste, their foreign trade ruined, and their coffers drained by the expenses of a war which they alone had to meet, while their political opponents were allowed to pursue their trade undisturbed and rapidly amassed princely fortunes by the sale of arms. The *κακοί* now felt themselves strong enough to demand a share in the government: they were successful in their demands and received a share in the administration of the law. Causer sees a reference to this in Theog. v. 60 which he translates: 'und kannte weder die Rechtsprüche der Edlen noch die der Gemeinen.' Finally they practically deprived the nobles of all power and ruled the state with a rod of iron, stifling all opposition and driving their critics to seek refuge in riddles and parables (Th. 667-682).⁴⁰ The next change was brought about by the revolt of the population of the country districts; their condition had been one of extreme poverty and they had derived no benefit from the events described above. They now rose

³⁵ 'Allerdings scheint es, dass Theagenos sich auf jenen Stand gestützt hat. Denn das einzige, was von seiner Regierung erzählt wird, der Bau einer Wasserleitung (Paus. 1, 40, 41) lag in Interesse der städtischen Bevölkerung' (p. 31)

³⁶ 'Noch an einigen Stellen bei Theognis erscheint der Adel als der allein herrschende Stand' (p. 32).

³⁷ What reason had a member of this middle-class party to view the rise of a tyrant with fear? It was the *fall* of a tyrant that had ruined their prospects. The devoted adherent of a party that owed all its power and prosperity to the tyrant Theagenos would not be so horrified at the thought of a return to their

former glories.

³⁸ 'Diese (31-36) Stellen sind geschrieben, ehe die Gemeinen [*οἱ κακοί*] die politische Macht errungen hätten, welche ihnen Theognis nicht gönnte.'

³⁹ 'Sie waren nicht verpflichtet—oder nicht berechtigt—zum Kriegsdienste' (p. 29): a statement which Causer endeavours to prove by the help of Theognis 865-868. Is it likely that any state would keep such a large section of the population in idleness at a crisis which threatened its very existence?

⁴⁰ 'Faktisch waren sie eine Zeit lang die herrschende Partei . . . Diese Partei übte einen solchen Terrorismus aus,' u.s.w. p. 31.

en masse, took the town by storm, and established a democracy. It is to this revolution that Theognis refers in vv. 53-60.

Plausible as the above theory may appear, it is impossible to accept it, mainly for the following reasons. Theagenes, we are told, came to power as champion of the industrial class. Of this statement no proof whatever is offered beyond a mere reference made by a tourist many centuries later to an aqueduct built at the tyrant's orders. It is much more probable that Theagenes came forward as the protector of the country population, and we can appeal for support to the passage in the Politics already referred to (1305 *a*), for the attack on the fertile lands of the rich was evidently a bid for the favour of the distressed peasants whose lands lay on the barren and unproductive hillsides. It was easier to set up a tyranny in those old days, says Aristotle in the same passage, because the people lived on the land and were busy at work. Theagenes, like Pisistratus (with whom his name is mentioned more than once by Aristotle), probably did all in his power to help the peasant farmers and to keep them busy with their own private affairs on the land; he had no wish to see them flocking into the towns. This policy he seems to have carried out with great success, for the country people remained on the land and kept aloof from politics till the time of Theognis (Th. vv. 53-60).

It is hard to see how any reader of Theognis can for a moment believe that the poet ever changed sides in politics. Elegy 27-38 is the work of a man who has always been true to the creed taught to him in his childhood, and has never swerved in his allegiance to the only true faith. Such words could never have come from the lips of a man who had been guilty of the very offence he himself denounces, nor would he have had the assurance to speak in such self-confident tones to a pupil who had not yet forgotten the reproaches hurled at those he was now called upon to imitate and admire as the only possible saviours of society.

Again, the language used by Theognis in Elegy 53-60⁴¹ makes it quite clear that the rule of the nobles was immediately followed by a democracy, and thus there is no room left for the assumed joint-rule of the aristocrats and the industrial class which led to the triumph of the latter. In referring to the revolution only two classes are mentioned by the poet, viz. 'the good' and the new comers; and he describes the change by saying that the 'good' are now 'bad' and the 'bad' 'good.' This can only mean that power was before held exclusively by the 'good,' (that is, the nobles) and that they lost it at one swoop: there was a complete reversal of positions. Cauet takes the term *κακοί* to denote the wealthy middle-class as distinguished from the nobles (*ἀγαθοί*) and the common people (*δῆμος*). Such a distinction does not exist. In vv. 57, 58 we are told that the peasants are now 'good' and the

⁴¹ *Theog.* 53-60.

Κύρνε, πόλις μὲν ἔθ' ἤδε πόλις, λαοὶ δὲ δὴ ἄλλοι
οἱ πρόσθ' οὔτε δίκας ἤδεσαν οὔτε νόμους,
ἀλλ' ἀμφὶ πλευρῇσι δορὰς αἰγῶν κατέτριβον,
ἔξω δ' ὥστ' ἐλαφοὶ τῇσδ' ἐνέμοντο πόλεος,

καὶ νῦν εἶσ' ἀγαθοί, Πολυπαίδη· οἱ δὲ πρὶν ἐσθλοὶ
νῦν δειλοί· τίς κεν ταῦτ' ἀνέχοιτ' ἐσορῶν;
ἀλλήλους δ' ἀπατῶσιν ἐπ' ἀλλήλοισι γελῶντες,
οὔτε κακῶν γνῶμας εἰδότες οὔτ' ἀγαθῶν.

'good' are δειλοί, and δειλοί, as Cauer himself admits, can only refer to the commons who have now acquired political rights.⁴² In Theognis the two terms κακοί and δειλοί are constantly interchanged and used as synonyms, just as ἀγαθοί and ἐσθλοί are used indifferently to denote the nobles; cf. 101, 2.⁴³ In another version⁴⁴ of the elegy we are now discussing (53-60) κακοί is substituted for δειλοί, but I should not be inclined to lay much stress on this point, as the second version is evidently the work of a person who intentionally changed the order of the words in the first.⁴⁵ As a political term Theognis uses κακοί without distinction for all who are not of good birth, and also for those who desert the ἀγαθοί and join the other side. κακῶν in v. 60 must refer to the same persons as δειλοί of 58,⁴⁶ and v. 60 means 'they do not know the distinguishing marks of "good" and "bad" men,' that is, they do not know how to behave in their new position; although they have assumed the role of ἀγαθοί they still conduct themselves like κακοί.⁴⁷

Nor can we accept Cauer's interpretation of 39-42, though he is partly supported by most editors of Theognis, who assume that the poet is here protesting against the violence of his own colleagues in the aristocratic party. In vv. 41, 42 the blame is attached to the ἡγεμόνες, and by this Theognis must mean the 'leaders' of the masses, for he never blames the nobles, nor is it likely that he would use the word κακότης in referring to the conduct of the ἀγαθοί.⁴⁸ The elegy was written when the commons had already seized political power, but had not yet begun to use it in their own interests. So far they are 'prudent,' but they are not likely to remain so, as their leaders are egging them on. It is these demagogues who 'give the masses copious draughts of the wine of liberty' that are made responsible for the excesses of the democracy by Aristotle, Plutarch, and Theognis himself.

⁴² *Philologus* 50, p. 534, 'Darum klagt Theognis, dass die Plebs die Stelle der edlen Geschlechter einnimmt und die Edlen zu Gemeinen geworden sind . . . von den κακοί, den wohlhabenden Bürgern, ist 57 noch keine Rede: erst 60 werden sie erwähnt und von der eben zur Herrschaft gelangten Menge ausdrücklich unterschieden.'

⁴³ Μηδεὶς σ' ἀνθρώπων πείσῃ κακὸν ἄνδρα φιλήσαι,
Κύρνε· τί δ' ἔστ' ὕφελος δειλὸς ἀνὴρ φίλος
ὢν;

⁴⁴ *Theog.* 1109-1114.

Κύρν', οἱ πρόσθ' ἀγαθοὶ νῦν αὖ κακοί, οἱ δὲ κακοὶ
πρὶν

νῦν ἀγαθοί· τίς κεν ταῦτ' ἀνέχοιτ' ἐσθρῶν;

⁴⁵ 57 ἀγαθοί . . . οἱ δὲ πρὶν ἐσθλοὶ | νῦν δειλοί

1109 οἱ πρόσθ' ἀγαθοὶ νῦν αὖ κακοί, οἱ δὲ κακοὶ
πρὶν | νῦν ἀγαθοί.

59 ἀπατῶσιν . . . γελῶντες.

1113 ἀπατῶντες . . . γελῶσιν.

60 οὔτε κακῶν . . . οὔτ' ἀγαθῶν.

1114 οὔτ' ἀγαθῶν . . . οὔτε κακῶν.

⁴⁶ In spite of his carefully-drawn distinctions Cauer translates δειλοί and κακοί here by the same word *die Gemeinen*.

⁴⁷ Liddell and Scott quote v. 60 s.v. γνώμη = 'token, mark.'

⁴⁸ 39-42;

Κύρνε, κύει πόλις ἦδε, δέδοικα δὲ μὴ τέκη ἄνδρα
εὐθυντῆρα κακῆς ὕβριος ἡμετέρης.

ἀστυὶ μὲν γὰρ ἔθ' οἷδε σαύφρονες, ἡγεμόνες δὲ
τετράφεται πολλὴν ἐς κακότητα πεσεῖν.

43-52:

Οἰδεμίαν πω, Κύρν', ἀγαθοὶ πόλιν ὤλεσαν ἄνδρες·

ἀλλ' ὅταν ἐβρίξῃν τοῖσι κακοῖσιν ἄδη,

δῆμόν τε φθείρωσι, δίκας τ' ἀδίκοισι διδῶσιν

οἰκείων κερδέων εἴρεκα καὶ κράτους,

ἐλπεο μὴ δῆρ' ἐκείνην πόλιν ἀτρέμ' ἔσσεσθαι,

μηδ' εἰ νῦν πολλῇ κείτα· ἐν ἡσυχίᾳ,

εὖτ' ἂν τοῖσι κακοῖσι φίλ' ἄνδρασι ταῦτα γένηται,

κέρδεα δημοσίᾳ σὺν κακῷ ἐρχόμενα.

2κ τῶν γὰρ στάσιες τε καὶ εὐφυλοὶ φῆνοι ἀνδρῶν
μουναρχοί θ'· ἢ -δέκε υἱόποτε τῆδε ἄδοι.

The two elegies 39—42, 43—52 are exactly parallel and describe one and the same state of affairs. In the second we are told that 'good men never ruined a state,' but where the 'bad' are lawless and give suits to the unjust [this proves that the bad are already in power] and sacrifice the public weal to private gain, that state will soon be ruined, though it may now be enjoying perfect quiet: for the lawlessness of the 'bad' leads to strife, murder, and tyranny. The *κακοί* of the second elegy are the *ἡγεμόνες* of the first: in both elegies they are accused of *ὑβρις*. *ἄστοι μὲν γὰρ ἔθ' οἶδε σαόφρονες = μηδ' εἰ νῦν πολλῇ κείται ἐν ἡσυχίῃ*. In both elegies the poet fears a tyrant may be chosen to direct the people in their attacks on the nobles, just as, half a century before, Theagenes led them against the landowners, and this is what I take to be the meaning of line 40, 'a man to steer or guide the lawlessness in our state.'⁴⁹

I suggest the following as a probable account of what occurred at Megara during the life-time of Theognis. After the expulsion of Theagenes the nobles ruled the state and refused to give their fellow-citizens any share in the government. This exclusiveness on their part led to the formation of a temporary alliance between the town population including the rich manufacturers and merchants of the middle class and the distressed peasants of the country districts. There was a revolution, and a democracy was established. Before long there was a split in the coalition, for the masses, at the instigation of their leaders, attacked the richer citizens without regard for party considerations, and passed measures depriving them of a great part of their property. The nobles and richer middle class were now drawn together by community of interests, and a new political party was formed; marriages between members of the old nobility and the richer citizens of the middle-class became frequent, and distinctions of birth tended to disappear altogether. Some of the nobles still held aloof and looked upon the breaking-down of social barriers with dismay. Theognis can see no hope of safety for the state except in a return to the good days when the nobles were supreme, and he protests with great bitterness against the contamination of nobility by inter-marriage with the 'bad' and 'low.' But he was the prophet of a lost cause, for self-interest and their common losses brought the nobles and richer citizens closer and closer together; great numbers of both classes had their property confiscated and were driven into exile. Finally they returned together with an army, attacked the disorganised democrats, and defeated them. A new constitution was drawn up in which political privileges⁵⁰ were shared by all who had taken part in the restoration of the exiles.

⁴⁹ Cf. *εὐθυκτήρ οἶαξ* Aesch. *Suppl.* 717.

This elegy (39-42) occurs a second time in the collection (1031 *sqq.*) where instead of v. 40 we read

ὑβριστήν, χαλεπῆς ἡγεμόνα στάσιος,

a reading which is still more favourable to the explanation here suggested.

⁵⁰ Aristotle 1300 a.

II.

The Arrangement of the Poems.

The Theognidea, as we possess them, consist of two books; the second of these, which deals exclusively with the love of beautiful boys, is found only in one MS. (Mutinensis 10th cent.),⁵¹ and is certainly not the work of Theognis himself. The first book contains a very great amount of foreign matter, and must be very different from what passed under the name of Theognis in the days of Plato and Isocrates. Many attempts have been made to discover some general plan or method in the arrangement of the poems. The whole collection is not arranged according to subject-matter, nor is there any reason to suppose, as some have suggested, that the poems were once arranged in alphabetical order.⁵² Of all the theories advanced the most plausible is perhaps the catchword theory, which was first suggested with extreme caution by Welcker in his edition of Theognis (1826), was afterwards worked out in detail and stoutly upheld by Nietzsche,⁵³ further exemplified, sharply criticized and modified, but still accepted in part by Fritzsche,⁵⁴ and has received the qualified approval of one of the greatest authorities on the subject, J. Sitzler, who has given us the best equipped and most comprehensive edition of the poems.⁵⁵

It will be convenient to take Nietzsche's article as the basis of our investigation. Before introducing his own theory, he denies that there is any trace of arrangement according to subject-matter: 'the poems are not even gathered together under special headings, as for instance, *περὶ φίλων*, *περὶ οἴνου*' (p. 170); a statement which is quite true so far as it refers to the collection *taken as a whole*, for we certainly do not find all the poems on one subject collected into a single group: but we can trace the sequence of thought in many parts of the collection, and we often come across a series of several poems dealing with the same topic,⁵⁶ and, as we shall see, one section⁵⁷ of the book is very carefully put together, with opening prayers, general introduction, headings, subheadings, and epilogue: and it is this very section which gives the best support to Nietzsche's theory. He states his theory as follows: 'Our collection then is not arranged according to subjects or letters of the alphabet, but according to words [or expressions].

⁵¹ 1231-1389 with the title *ἐλεγείων β'*. The same MS. gives to the first book (1-1220) the title *θεόγνιδος ἐλεγείων α'*.

⁵² Though every reader of the book must have been struck by the occurrence of several successive elegies beginning with the same letter (*e.g.* 73, 75, 77, 79: 611, 615, 617: 619, 621, 623), the cases are not numerous enough to justify us in assuming such an arrangement for the whole collection; and besides, this would necessitate the separation of elegies

closely connected in subject-matter.

⁵³ *Rheinisches Museum*, 1867, p. 161-177.

⁵⁴ *Philologus* xxix. pp. 526-546.

⁵⁵ *Theognidis Reliquiae*, 1880.

⁵⁶ *e.g.* 155-72 seven poems on the uncertainty of human affairs, 467-510 conviviality, 971-1012 ten poems on conviviality, 1039-1048 conviviality, 1082c-1102 eight poems on friendship.

⁵⁷ 1-254.

The fragments are linked together by catchwords, so that we find the same word [or similar expressions] in every pair of adjacent poems.⁶⁸ After stating his theory he proceeds to discuss two sets of exceptions, which he labels (1) 'apparent' and (2) 'real.' 'Sometimes in the three consecutive elegies abc, we find a catchword connecting a with c, but none to connect a with b, or b with c.' Here the exception is only apparent, for in such cases we must, according to Nietzsche, assume that 'b is not a separate elegy, but a part of either a or c.'⁶⁹ Before accepting this canon without any limitations we should first prove the existence of the catchword principle in the rest of the collection, and even then we should not be justified in combining two totally distinct poems, in defiance of all probability and possibility, merely because the combination will supply a missing link in the chain of catchwords. Nothing but a blind adherence to the catchword theory could induce any man to join such poems as 959-62 and 963-70, or 181-2 and 183-8.

Next come the 'real' exceptions. According to Nietzsche, every break in the series of catchwords is due to an omission in our manuscripts. When the editor of the 'last edition' of the poems (*i.e.* the catchword edition) was unable to find a suitable catchword, he went back to poems he had already incorporated in his collection, selected one that supplied the required links, and inserted it a second time. Later copyists, thinking these repeated poems superfluous, omitted many of them. There is not the remotest foundation for this extraordinary theory. The object of the repetition of poems, we are told, is to supply catchwords. A glance at the repeated poems will show us that in most cases they have no catchwords at all to connect them with their neighbours. Nietzsche's remedy for this is more repetition: if a repeated poem does not give us a catchword, he adds another poem. Take away the repeated poem, and frequently we can find fairly good catchwords to join the poems for whose special benefit the repeated elegy is supposed to have been brought in. The following may serve as instances of the failure of Nietzsche's explanation of these repeated poems.⁶⁹

Most of the repeated poems occur massed together in groups near⁶¹ the end of the book. Between 1080 and 1083 come two poems of four lines each that have occurred before (39-42, 87-90).⁶² They have no catchwords to connect them with one another or with the preceding and succeeding poems. To uphold the catchword theory here, Nietzsche had to assume that these repetitions originally included eight more lines, which he arranged thus: 87-92; 93-100 forming one poem with 1083, 4 which he considered to have once

⁶⁸ 'Unsere Sammlung ist also weder nach Gedanken noch nach Buchstaben geordnet. Wohl aber nach Worten. Nach Stichworten sind die Fragmente an einander gereiht, so dass je zwei Fragmente ein gleiches oder ähnliches Wort gemein haben.' p. 171.

⁶⁹ P. 171. The elegies are not divided in our best MSS., so that we have no good manuscript tradition to guide us in making our divisions.

⁶⁰ In Bergk-Hiller-Crusius' *Anthologia* all the

repeated poems are printed exactly as they stand in the text of the best manuscript. Other editors generally content themselves with a reference in the notes.

⁶¹ Only *three* repetitions occur before 1038, all the rest (excepting half a dozen in the *Paedica*) occur between 1038 and 1185.

⁶² Lines 93, 4 are not repeated here in the MSS., although Bekker and Bergk² state that they are.

been the closing couplet of 93-100. All this manipulation still leaves us with a gap at each end of the group of repetitions (*i.e.* before 1081 and after 1084). Leave out the repeated poems, and we immediately get a catchword ἐσθλόν (1079, 1083).

Between 1160 and 1163 we have three repetitions: these have no catchwords. Nietzsche joined the first repetition to the preceding poem (an impossible combination) and so found a catchword for the second repetition in 1157.⁶³ The next entry in his scheme is 'Lücke,' which means that he failed to connect the third repetition with the two adjoining poems. Omit the three repetitions and we get catchwords that would certainly satisfy Nietzsche, θυμόν (1160)=νόος (1163).

Between 1164 and 1165 we have two poems repeated (97-100 415-418). In subject they are closely connected with the following couplets (1165 sqq.) With 1163, 4 they have no connection whatever. To make them fit in with his theory, Nietzsche added two more lines (95, 6), to the first, and to connect the second of the repeated elegies with what follows, he was compelled to form one poem out of three separate couplets (1165-1170). The poems are repeated, he says, to provide a catchword. Even granting that we may have to introduce *two* poems to get the required link, what reason could there possibly be for repeating two poems with *the same* catchword, as ἐταῖρον (1164 a, 1164 f)? Some repetitions have no catchwords at all, *e.g.* 1104 a-1106, 1109-1114, 1038 ab. Others have a catchword joining them forwards or backwards but not both ways, *e.g.* 1114 ab, 332 ab, 509, 510.⁶⁴ There is only one case of a repeated poem with satisfactory catchwords (643-4). It is thus quite clear that the repetitions give us no help in proving the catchword arrangement; indeed it would be far more plausible to maintain that the poems were first arranged according to catchwords and that the series was then broken in many places by the insertion of repeated poems.

Nietzsche's theory fails to account for the *position* of the repeated passages which he assumes to have been omitted in the later manuscripts. The editor, he tells us, *went back*⁶⁵ to what he had already used. In Nietzsche's scheme⁶⁶ we have several gaps between 128 and 145; these cannot be filled by using any poems from 1-128: and again, contrary to his own rule, he adds 1179 after 172, and after 208 he suggests the insertion of 333. As a rule Nietzsche does not specify the poems that are to fill the gaps, but Fritzsche has endeavoured to do so, and in his scheme 15 of the first 16 gaps, and 31 of the first 40, are filled with poems taken from later parts of the book. If we accept the theory, we must assume that the later copyists, on noticing the repetition of any poem in the manuscript, often left it in where it occurred for the *second* time, and went back and crossed it out where

⁶³ This couplet (1157-8) is not found in the MSS. of Theognis, but has been inserted from Stobaeus.

⁶⁴ Here as elsewhere catchwords can be found

for the poems that deal with the same subject.

⁶⁵ 'Er griff zurück zu den schon gebrauchten' [Fragmenten] p. 172.

⁶⁶ p. 173.

it *first* occurred, a supposition which is absurd. Poems which occur twice in the earlier MSS. are found in one place only in some of the later MSS., and it is always the *repetition* which is omitted.⁶⁷

'The older our MS.', says Nietzsche, 'the greater the number of repetitions it contains'; that is a fact; therefore, he argues, a MS. older than the oldest we possess will contain still more repetitions, and so on until we arrive at an original MS. which contained all the repeated poems and an unbroken series of catchwords. This argument will not hold, because the number of repetitions we must assume to have dropped out in the earlier stages of the history of our text is far too great. The difference between the number of repetitions in our oldest MS. (A. 10th century) and the 15th century Paris C⁶⁸ consists of less than forty lines. To account for the 112 gaps in Fritzsche's arrangement,⁶⁹ we must assume that at least 224 lines have been omitted in the interval of five centuries⁷⁰ that elapsed between the copying of the original MS. and our tenth century A.

When a poem is repeated in the MSS., it is often given in a totally different form, so that we may almost consider it as a different poem: ⁷¹ sometimes the difference is but slight. Nietzsche endeavours to explain the variants by assuming that the editor purposely changed the reading merely for the sake of variety. But the changes are frequently far too serious⁷² to be thus explained away and point to the existence of several rival versions of the poems. A good argument against his theory is furnished by 877,8, an elegy which begins with ἦβα μοι (or ἦβώοις, for the reading is not quite certain, but there is no doubt that the first word is some form of the root ἦβ—). After 1070, where the couplet again occurs, *all* the MSS. that contain the repetition read τέρπρό μοι, although ἦβα is the very word required as a catchword (= ἦβης 1070). Here Nietzsche and Fritzsche quite ignore the testimony of the MSS. and quietly insert the reading of 877.

Nietzsche has taken four sections of the poems and endeavoured to arrange them according to catchwords. In the first section (1—260), he has been fairly successful in finding similar words or phrases in neighbouring poems. In the second and third sections (419—510, 855—1216), the catchwords are not so satisfactory, he has taken more unwarrantable liberties with the text, and the catchword connection is broken more frequently. In the last section (1235—1389), the poems all deal with the same topic (musa paedica), and accordingly supply more or less satisfactory catchwords.⁷³

⁶⁷ e.g. A alone repeats 209, 10 after 332, all the other MSS. have it in the first place only.

⁶⁸ We must remember that the repeated poems are not the only things omitted in the younger MSS. e.g. 937, 8 are omitted in 10 MSS.

⁶⁹ Fritzsche has arranged the whole collection according to catchwords, and though he uses very simple and common words, his scheme still contains 112 gaps. Cf. p. 543 'In den 370

Frsgmenten sind 112 Lücken der Stichwortverbindung.'

⁷⁰ Nietzsche dates our collection between 483 A.D. and Stobaens.

⁷¹ Cf. 53—60 and 1109—1114.

⁷² Occasionally they are too trivial.

⁷³ Generally some form of φιλ- or ἐρ(ω) and ᾤ παῖ.

We shall now consider Nietzsche's arrangement of the first section.

First come four elegies addressed to the gods. In 1—4, 5—10, Apollo is invoked, Artemis in 11—14, and the Muses and Graces in 15—18. It is easy enough to find a catchword to connect them with one another. Nietzsche's series is 1—10, Διὸς τέκος, 11—14 θύγατερ Διός, 15—18 κοῦραι Διός—ἔπος. By taking 1—10 as one poem he has secured three almost identical expressions, but 1—10 are two poems, and are printed as such by all the editors.⁷⁴

Are we to believe with Nietzsche that these elegies are placed next to one another merely because they contain similar expressions? In poems on the same subject we can almost always find similar words or expressions, and where the poems are arranged according to subject-matter, Nietzsche has not much difficulty in drawing up his scheme; but as we shall prove, his theory breaks down completely where we have a rapid succession of elegies on different subjects. In this first section (1—260) the poems have been very carefully arranged and those on the same subject and even on the different aspects of the same subject are grouped together. And this is how it is so easy to find catchwords in this section; the only part of the book which lends even a shadow of support to the theory.

I am inclined to look on the greater part of this first section (*i.e.* 1—254) as a little collection of Theognidea complete in itself. After the opening prayers we have first an introductory elegy (19—26) addressed to Cynos, giving the author's name and method of composition. In 27—30, 31—38 he declares his intention of instructing Cynos in the ways of the 'good,' and states his general maxim or text, 'always associate with the "good" and avoid the "bad."' He then (39—42, 43—52, 53—68) proceeds to discuss the political situation, and shews how the 'bad' are responsible for the ruin of the state: the poet's young friend is told how to conduct himself under the new régime, and is warned against making friends of the new masters of the city. 69—128 are all on the subject of friendship; 69—72 'make friends of the good': 73—86 five elegies on the scarcity of faithful friends; 87—100 tell us what a friend ought to be and ought not to be: 101—114, three elegies on 'the "bad" as friends.' 115—128 three elegies on the difficulty of distinguishing between true and false friends. As we have sixteen poems (53—128) so closely connected in subject it will be easy to find some word denoting 'friendship' as catchword to connect them. And it is precisely words of this kind that Nietzsche has used. In fact we can tell the subject-matters by merely glancing at the catchwords he uses.⁷⁵

He has the following scheme for 15—128.⁷⁶

15—18 κοῦραι Διός—ἔπος: 19—30 ἔπη—ἀνδάνει: 31—38 ἀνδανε: 39—52 ἄδη—πόλις ἦδε: 53—60 ἦδε πόλις—ἀπατῶσιν: 61—68 ἀπάτας—σπουδαῖον:

⁷⁴ 1—4 is complete in itself and 5—10 is probably a fragment of a Delian hymn, and was very likely inserted as a parallel to the first elegy. Nietzsche keeps the poems apart and his series is 1—4 ἀνα (Λητοῦς) 5—10 ἀναξ

(Λητώ) θεά 11—14 θεά-θύγατερ Διός

⁷⁵ *e.g.* some form of πιστ- (πίσυνος) occurs in every one of the six poems 53—86 (taking 79—86 as one poem).

⁷⁶ P. 17.

69-72 σπουδαῖον—πρήγμ' : 73-76 πρήξιν—πιστός : 77-78 πιστός : 79-86 πιστούς—γλώσση : 87-92 γλώσση : 93-100 γλώσση—ἀνὴρ φίλος : 101-112 ἀνὴρ φίλος : 113-114 ἄνδρα φίλον—ἐταῖρον : 115-118 ἐταῖροι—κιβδήλου : 119-128 κιβδήλου.

The catchwords here often seem prettily arranged in groups of three. A mere glance at the text will shew us on what a flimsy foundation these series rest. Nietzsche takes 19-30 as one poem : but 19-26 is complete in itself and will not bear the addition. As *ἀνδάνει* occurs in 26, it is no longer at our disposal : we cannot follow Nietzsche in joining 39-42 to 43-52⁷⁷ ; so *ἄδη* (44) is also disposed of. We must now look for new catchwords. Fritzsche has⁷⁸ 19-26 *ἔπη—σοφιζομένῳ* : 27-30 *πέπνυο—ἔμαθον* : 31-8 *μαθήσεται—κακοῖσιν* : 39-42 *κακῆς—πόλις ἦδε* : 43-52 *πόλει τῇδε*.

The second group of three (*πιστός*) has been secured by joining 73,4 to 75,6, a combination which is not impossible, but had it suited Nietzsche's purpose he could with equal appropriateness have joined 75,6 to 77,8, or if necessary have formed one continuous poem of 69-86. Besides those given by Nietzsche numerous other catchwords can be found to connect these groups, for here, as elsewhere, similarity of thought implies similarity of expression. In the third group of three, the first member *γλώσση* disappears if we follow BHC in keeping 87,8 apart from 89-92. The next group of three keeps together only if we print 93-100, 101-12 as two poems. Even if we follow BHC in the arrangement of 87-112 we can still find catchwords *e.g.* 87,8 *φιλεῖς, νόος* : 89-92 *φίλει, νόον, γλώσση* : 92-100 *φίλος, γλώσση* : 101-4 *φίλος, δειλός, κακόν, ἔχων* : 105-12 *φιλότης, δειλούς, κακοῦς, ἔχουσι*.

Nietzsche is hardly justified in combining the two couplets 115,6, 117,8 ; if we separate them, there is a break in the scheme of catchwords, unless we accept Fritzsche's *πανρότεροι = χαλεπώτερον*.

129-72 contain general remarks and reflections on human affairs, and deal with our relations towards the gods, and especially with our helplessness ; the dominant note is 'all is chance ! we know nothing.' Nietzsche failed to find any catchwords to connect 129-45 (4 poems). Fritzsche offers such weak links as *ἀνδρί* and *ἀνθρώποις*.⁷⁹ Rejecting these we must assume five gaps.⁸⁰

For the next elegies Nietzsche has the very satisfactory series 146-8 *ἀρετή* : 149-50 *ἀρετή—ἀνδρὶ δίδωσι* : 151,2 *ᾤπασεν ἀνδρὶ—ὑβριν*. His next poem is 153-8 *ὑβριν—μήποτε*. This combination is not possible, for the two parts (153,4, 155-8) have no connection at all in subject. We know ('*Αθην. Πολ.* 12) that the couplet 153,4 belongs to Solon, and there is no reason for adding the next four lines to it. After 154 there is now

⁷⁷ All the editors print these separately.

⁷⁸ If we follow Bekker in printing 27-8, 29-30 as two elegies, we then get four poems without a catchword, unless we take *Κύρνε*.

⁷⁹ 129-30 *ἀνδρί* ; 131,2 *ἀνθρώποις* ; 133-42 *ἀνθρώπων* ; 133,4 *θνητῶν*.

⁸⁰ Unless we join the smaller elegies to form one long poem.

a gap in the catchword series. By the very questionable combination of 159,60 and 161-4 Nietzsche avoids the gap that would otherwise occur after 160.⁸¹ Next we get 165,6 ὄλβιος: 167-70 ὄλβιος—θεοί: 171,2 θεοῖς; but we cannot follow him in forming one poem of the two couplets 167,8, 169,70; this gives us a gap after 168.⁸²

After 172 there is a gap which Nietzsche fills by inserting 1179,80 giving us catchwords θεοὺς—ἔρδειν. 173 starts with a new subject 'poverty': we have here three poems on this subject, and the next poems 183-208 deal with the contrary, 'wealth' and its influence. In Nietzsche's scheme 173-80 form a single poem (instead of two), and the next couplet (180,1) has been joined to the following poem (183-8) though the latter deals with a new subject. The catchwords are 173-80 ἔρξαι—δίξησθαι: 181-8 διζήμεθα—χρήματα⁸³: 189-96 χρήματα: 197-208 χρήματα—φίλοισιν.

Even if we reject Nietzsche's combinations we can still find catchwords: 173-8 πενίη, χρή: 179-80 πενίης, χρή, χαλεπήs, Κύρνε: 181,2 πενίη, χαλεπή, Κύρνε. Then a gap: 183-92 χρήματα: 192-6 χρήμασι: 197-208 χρήμα. This proves how easy it is to find 'catchwords' in poems on the same subject.

After 208 Nietzsche has a gap which he fills with 333,4 φιλήσης—φεύγοντ'. 209-36 consist of nine elegies containing maxims and reflections on various subjects. 237-54 form a closing elegy in which the poet tells Cynus of the fame he has won for him.⁸⁴ After 210 there is a gap in Nietzsche's scheme, and another after 212. To get rid of the difficulty he proposes to omit 211,2. Then he gives us 213,4 ὀργήν: 215-20 ὀργήν (were it not for the recurrence of ὀργήν he would have taken 213-8 as a single poem, a proceeding to which we could hardly object). It is just these endless possible combinations that make it so easy to arrange the poems in this section according to catchwords. To avoid two gaps he has joined 215-8 to 219,20 (an impossible combination) and we get the series 215-20 ἀτροπίης: 221-6 ἄφρων: 227-32 ἀφροσύνη. His reason for joining 215-8 and 219,20 was to make up for the want of a catchword to connect them, and also to find a catchword (ἀτροπίης 218) to serve as a link with elegy 221-6.

The next links are 233-6 κενόφρονι—ὀλίγης τιμῆς ἔμμορεν: 237-54 ὀλίγης τυγχάνω αἰδοῦς: 255-6 τυχεῖν—κάλλιστον: 257-60 καλή. The above series is far from convincing, for ἀφροσύνη and κενόφρονι are not good catchwords, and the next two are twenty lines apart. 233-6 cannot form one poem, and if we keep the two couplets apart there will be a gap

⁸¹ Unless we accept τελεῖ (160) = τέλος (164).

⁸² Unless we accept ἀνθρώπων (168) = ἀνδρός (170).

⁸³ B.H.C. print 183-192 as one poem: and Nietzsche would have done so too were it not for the occurrence of a catchword χρήματα in

the two parts of it.

⁸⁴ As I have already said (p. 16), I consider 1-254 to be a small collection of Theognidea complete in itself—other poems were added to it later, or rather it was incorporated in a larger collection.

after 234 and another after 236, unless we take *άνήρ* (234) = *άνδράσι* (235) = *άνδρες* (241).

An examination of Nietzsche's scheme shows us that we find the most satisfactory catchwords in the groups of poems that deal with the same subject, the catchword generally being the very word we should naturally select as a heading for the section (e.g. *φίλος*, *οἶνος*, *πλούτος*).⁸⁵ And this is just what we should expect; similarity of thought necessarily implies similarity of language. Given a number of poems on 'friendship' or 'conviviality,' we can generally find in each member of the group some word with the root-meaning 'friend' or 'drink.' We have also noticed that when two poems supply us with a particularly good catchword⁸⁶ they are connected by something more important than a similar word, for they either contain exactly the same idea, or the second poem of a pair is a criticism, correction, or modification of the preceding elegy.⁸⁷ One of the best catchwords in the whole book is *κίβδηλος* (117, 119), and the two elegies in which it occurs deal with exactly the same subject, viz. the difficulty of detecting deceit in a friend. Something might be said for the catchword theory, if in neighbouring poems we frequently found a fairly striking similarity of expression but no connection in subject-matter. Occasionally we do find poems undoubtedly placed side by side on account of similarity of wording alone; but such cases are extremely rare,⁸⁸ there are not half a dozen in the whole book. With very few exceptions we never get a good catchword except where we have similarity of subject: where there is a break in the sequence of ideas, we have generally either a very unsatisfactory catchword, or else a gap in the scheme. The gaps are most numerous where the subjects change in rapid succession and the poems are short;⁸⁹ the longer elegies frequently supply us with some

⁸⁵ Poems addressed to the gods are sure to contain words like *θεός*, *θάνατος*, *Διός τέκος*.

⁸⁶ Sometimes two poems containing the same idea offer us no possible catchword. Here according to Nietzsche's theory, we must assume that an elegy has dropped out, and possibly we may have to break the sequence of thought by the insertion of a poem containing suitable catchwords: e.g. Fritzsche inserted a poem on 'poverty' between the two closely-connected convivial elegies 1045-6, 1047-8.

⁸⁷ c.g. 719-28 are a reply to 699-718; 1003-6, 1007-12 give the two sides of the same question. 931-2 suggest another solution of the problem: discussed in 903-30. Nietzsche arranges 903-932 as follows, 903-922, 923-932. Whether we take 903-930 as one poem or (which is far less probable) as two, 931-2 must certainly be taken by itself as a separate elegy. The argument in 903-30 is, 'spend rationally so that you may neither be in want while you live, nor yet leave anything behind you, for

that would be a waste.' 'No!' says 931-2 'save something to leave behind you, or else no one will mourn your death.'

⁸⁸ Cf. 309, 313 *ἐν μὲν συσσίτοισιν . . . ἐν μὲν μαινομένοις*. Cf. 409, 411.

⁸⁹ c.g. 209-221: a group of maxims that may be labelled 'miscellaneous,' with no catchwords at all. 260-302: twelve poems (in Bekker) with seven gaps. The longer poems give us *πάντα* 275 = *πάντα* 282, *τιθεῖ* 282 = *τιθεῖν* 286. 523-596: twenty-nine poems in Fritzsche's arrangement (30 in Bergk), with fifteen gaps. The catchwords in this last section are *πλούτος*; two gaps; *φίλον* (noun)—*φίλον* (adj.); *αὐλῶν*—*αὐλητῆρος* (same subject); 3 gaps; *τήνδε*—*τήνδε* *δικην*—*δικαίῳ*; gap; *άνδρῶν*—*άνδρα*; gap; *πόλλ'*—*πολλήν*, *χρημοσύνην*—*χρήματα*, *ἐχειν*—*ἔχων* *ἐσθλόν*—*ἐσθλός*; 4 gaps; *κακόν*—*ἐχθαίρω* *κακὸν* *άνδρα*—*ἐχθαίρω*; 2 gaps (Nietzsche found catchwords, *μάργον* = *ἀργά*!); *θεός*, *θεοί*; 2 gaps; cf. 639-658; 843-856.

word that may serve as link, e.g. 1008 νοῦ (verb), = 1016 νόον (noun), ὤλεσε 664 = ἀπόλωλεν 677, ἔρδουσι 675 = ἔρδειν 685.

'It is a fact,' says Nietzsche in summing up, 'that a great many of the fragments (more than half) are connected by catchwords; we therefore assume that the whole collection was arranged in this way.' His fact is quite correct, but his conclusion by no means follows; it must first be shewn that the fragments are *intentionally* connected by catchwords, and this certainly cannot be proved. If in the term 'catchword' we are allowed to include simple and trivial words,⁹⁰ synonyms and homonyms⁹¹ that often bear only the faintest resemblance to one another in meaning or sound, without any distinction between the different parts of speech, however far apart⁹² from one another the words may be; if, when it suits our purpose, we are allowed reasonable licence⁹³ in combining or cutting up poems dealing with the same subject; if we are permitted to fill up any gaps that may still be left (provided their number does not exceed half the number of poems in the collection) by the insertion of poems that have been already used or occur later, we shall, with all these resources at our disposal, always be able to prove a catchword arrangement in *any* collection of poems of the nature of the Theognidea, and generally, I think, with far greater success than has attended the efforts of Nietzsche and Fritzsche in their schemes. Had the supposed 'last editor' of our sylloge really wished to arrange it on the principle assumed by Nietzsche, he could, with the materials at his disposal, have handed down the poems in a series containing comparatively few repetitions. As the range of the Theognidea is very narrow and the whole

⁹⁰ e.g. ταῦτα (1050), σοι (1049), ἔχειν (several times in Fritzsche's scheme), τῇδε (541), ὁμῶς (495), ὥσπερ (449), οὐ (687), ἄλλος (796). Fritzsche's scheme has 112 gaps (370 poems); this number would be more than doubled if we refused to admit the very simple words he has used so often: e.g. some form of ἀνὴρ (with its synonyms ἄνθρωπος and even θνητός) is used as connecting link 35 times, φίλος (or some form of φιλεῖν, &c.) 36, κακός 20, ἀγαθός 10, θεός 11, Κύρνε 9. Sometimes we have several words in two poems that would serve equally well as catchwords, and we find Nietzsche using one, and Fritzsche another. Fritzsche is far more charitable than Nietzsche in admitting simple words.

⁹¹ οἶνον = κωμίζοιμι (886); ἔβην = εἰμι (945); αἰσχροὺς = ἀναλκείης (891); ἔργματα = ἔργον (901); σοφός = τοῖς συνιέουσιν (904); ἀρετή = σοφίης (942); κλινόμενος = τρέψας (949); all the above in a group of eleven poems; δειλοῖς = ἄφρονες καὶ νήπιαι (1039); πέπονθα = ὀλοφύρομαι (1131). Similarity of sound: εὐδωμεν = πινωμεν (1043); μάργον = ἀργά (584); παυρότεροι = χαλεπώτερον (117); μὴ θαύμαζε = μὴ κώμαζε (1351); παρ' ἄφροσι = παρ' ἀνδράσι (627).

⁹² In a group of three poems a, b, c the catchword joining b to a often comes near the end of b, while the catchword for c comes at the very beginning of b. [E.g. 659-66, 667-82, 683-6, with their catchwords ὤλεσε (664), ἀπόλωλεν (677), ἔρδουσι (675), ἔρδειν (685). I have noticed one instance where the catchwords are 25 lines apart (νικᾶτω 466 = ἀνίκητος 491).

⁹³ Nietzsche is often very unreasonable as we have seen. The catchword theory may prove fatal to sound criticism and do much to warp and corrupt our judgment when we endeavour to establish the text of Theognis and to determine the exact length of each poem. We have already seen how Nietzsche's theory leads us to join disconnected fragments: it also induces us to cut up single poems, or at any rate prevents us from combining two fragments that ought to form one poem. 903-930 may or may not be a single poem; the question was settled for Nietzsche by the occurrence of πτωχεῖαι twice, and he printed the lines as two poems; had there been no catchword he would with equal confidence have printed them as one poem.

collection may be included under the heads 'Ethics,' 'Politics,' 'Conviviality,' and 'Love,' the number of gaps in Fritzsche's scheme is absurdly large, especially if we bear in mind the frequent use he has made of the simplest words in the Greek language.

Sitzler accepts the catchword theory in part: he holds that the poems are connected sometimes by similarity of thought, sometimes by similarity of wording, and very often by both. In his printed text he has marked the catchwords by wider spacing of the letters.⁹⁴ No one will deny that poems near one another⁹⁵ often contain the same word or phrase, but we maintain that this is almost always due to similarity of thought or to mere chance, and chance can do much.

To satisfy myself on this point, I took up the first collection of short poems I laid my hands on, and chance favoured my choice. They happened to be the poems of Asclepiades taken by their editor⁹⁶ from here and there in the Palatine Anthology: they consist of 180 lines, made up of 38 poems (all elegies, except one), 25 of which contain 4 lines each, eight 6 lines, two 8 lines, two 2 lines, and one 12 lines. Nos. 1-24 are on what may be called erotic subjects, 25-27 are convivial, 28-38 inscriptions and epitaphs. Without once resorting to Nietzsche's device of combining different poems, I managed, with only five gaps, to find a series of catchwords quite as satisfactory as those provided by Nietzsche in support of his theory.⁹⁷ It will be noticed that though we have so many poems on the same subject, the catchwords do not give us a clue to the subject as often as they do in Nietzsche and Fritzsche's schemes. The following are the catchwords in my arrangement of Asclepiades.

1. *πτερά*: 2. *πτερά—αὐτή*, **Ἐρωτα*: 3. *αὐτοῦ, ἐρώντων*: 4. *αὐτοῦ—μικρὸς* **Ἐρως*: 5. *νεογνὸς* **Ἐρως—χρυσέην*: 6. *χρυσῶ—Ἐρως*: 7. **ἔρωτες—πάθω, ζῶν*: 8, *πάσχεις, ζῶν—Βάκχου ζωρὸν πόμα, δάκρυα, πουλύν, ἰδεῖν, μένομεν*: 9. *οἶνος, ἐδάκρυσεν, πολλῇ, ἔβλεπε, ἔμμενε—ἐρᾶν*: 10. *ἐρῶσι*: gap to be filled by repeating elegy 2 **Ἐρωτα—ᾠμων*: 11. *ᾠμων—βέλος*: 12. *τόξοις—βούλομαι*: 13. **ἤθελε*⁹⁸—*Νικῶ*: 14. *Νικαρέτης*⁹⁹—*φίλη*: 15. *φίλει—ἔχη*: a gap to be filled by repeating 12 **ἔχειν—Ἐρωτες*: 16. **Ἐρωτες—ἔτρωσε, ἐπέβην*: 17. *ὑβρίζει, ἐλήλυθα—νύξ, ἐλήλυθα, προθύροις*: 18. *νύξ, ἤλυθες, θύρην—ἐρώντι, μίαν*: 19. *διψῶντι*,¹⁰⁰ *μία—φιλέοντας*: 20. *φιλέοντα—*

⁹⁴ He uses the same licence as Nietzsche and Fritzsche in his application of the term 'catchword.'

⁹⁵ They need not necessarily be next to one another, for he often marks catchwords in poems separated from one another by one or more elegies e.g. *παρόντα* (1151) = *παροῦσι* (1133) with a long poem 1135-50 between them, *κριθαῖσι κορεσθεῖς* (1269) = *κριθῶν ἐκορέσθης* (1249) with five poems between. There are so many catchwords in each poem, especially in Book II., that the reader is often quite lost in the maze of cross-references.

⁹⁶ J. A. Hartung; *die griechischen Elegiker unter den ersten Ptolemäern*, pp. 53-72. Leipzig 1859. One of the poems is from the Planudean Anthology.

⁹⁷ With a little more boldness in using 'synonyms' I could reduce the number of gaps to one.

⁹⁸ Cf. Nietzsche's *δεινὰ παθὼν* = *ἀχρύνμενος* κῆρ (1114 a).

⁹⁹ Cf. N. *σώφρων* = *σύμφορον* (457), *νικᾶτω* = *ἀνίκητος* (491).

¹⁰⁰ Similar sound cf. N. *εὐδωμεν* = *πίνωμεν* (1042).

Κύπριδος κεισόμεθα : 21. Κύπρι, κοίτης : ¹⁰¹ 22. Κύπρις—πυρός : 23. πυρί—λάμπουσ' : 24. φῶς πάρεχε—θεός : 25. θεός—ζῆν : gap to be filled by repeating 8. ζῶν—ἐλήϊσατο : 26. ληστήν—ρόδινων, λάβ', λογιούμεθα : 27. ροδίνους, λαβῶν, ἀριθμήσει—ρόδίνους : 28. πορφυρέην—Κύπρι : 29. Κύπρι—ἔθηκε : 30. θήκατο—παῖδας : gap to be filled by repeating 1. παῖς—Κύπριδος : 31. Κύπριδος—εἰκῶν : 32. γλίμμα—χερὸς : 33. χερί—ἔργα : 34. πόνος—ὄνομα : 35. οὔνομα—εἰμί : gap to be filled by repeating 7 εἰμί—ἐτέων : 36. ἐτῶν—ὀγδώκοντ' : 37. ὀκτώ ¹⁰²—τάφον : 38. ἡρίον. ¹⁰³

Here, in a chance collection of 38 poems, we have a series of catchwords broken only in 5 places. We should not be surprised then to find a chance collection of 370 poems connected by a series of catchwords with only 50 gaps : in the Theognidea, even if we accept all the catchwords admitted by Fritzsche, we have 112 gaps, so we cannot believe that this principle of arrangement was ever applied to our sylloge.

A slip on the part of Welcker is interesting as shewing the part chance can play in a case of this kind. In his Prolegomena, p. cv., he asserts that not infrequently (*haud raro*) poems have been placed next to one another owing to similarity of wording alone, and among other instances he adduces the couplets 1223, 4 : 1225, 6 : 1227, 8 (not included by BHC) : they give good catchwords. But these three poems are not contained in any of our manuscripts. 1223, 4, 1225, 6 are found in Stobaeus (20. 1 : 67. 4) and were first inserted among the Theognidea by Vinet. ¹⁰⁴ 1227, 8 (Stob. 11. 1) were first put in by Grotius and not by Vinet as Nietzsche states (*Rhein. Mus.* p. 171).

T. HUDSON WILLIAMS.

POSTSCRIPT.

After accepting the above article, the Editors of the Journal have asked me to add a short note with reference to Mr. E. Harrison's recently published *Studies in Theognis*. ¹⁰⁵ My article had already been written and sent in before I saw Mr. Harrison's book. On reading it through, I discovered that we hold divergent views on the fundamental principles on which my whole argument rests ; but owing to want of space I cannot here defend my own views at greater length or discuss in detail any of the considerations raised by Mr. Harrison. I must content myself with a mere enumeration of the main points on which we differ. In the first part of my article I have stated my conviction that the mere occurrence of a poem in the Theognidea was not enough to justify us in ascribing that poem to Theognis. In proof I pointed to the presence, in the collection, of poems known to have

¹⁰¹ Cf. Nietzsche γνώση = γνώμη (1172).

¹⁰² Cf. N. μάργον = ἀργά (584).

¹⁰³ It will be observed that in filling up the gaps I have in each case used a poem that has already occurred in the collection, in no case have I had to adopt Fritzsche's practice of taking poems that occur later.

¹⁰⁴ In his edition of Theognis (1543) Vinet

has the following note : 'et hos sex uersus (1221-6) ex Ioan. Stobaei Apophtheg. adleci-mus : quos ad hoc Theognidis poema referendos esse, uel Cyni nomen satis arguit. Tenebunt autem postrimum hunc locum, donec dexteriore aliquanto numine, suo tandem restituti fuerint.'

¹⁰⁵ Cambridge University Press, 1902.

been composed by other poets, and suggested the necessity of discovering some test which would reveal the real Theognis: this I found in an elegy of the poet's own making (19-26). At the beginning of II, I declared our Theognis to be quite different from the Theognis of Plato and Isocrates, emphatically rejected the claims of the 'Second Book,' and referred to the repetitions as 'rival versions' of the same poems. On all these points we differ. On the merits of the catchword theory we are in substantial agreement, and we have both adopted the same method of testing it. Mr. Harrison has examined the schemes of Müller: I preferred to take those of Nietzsche, as they afforded me an opportunity of discussing the repetitions at the same time. We both regard Megara Nisaea as the poet's home, but differ by half a century on the question of date. Mr. Harrison's book is in many ways, especially on matters of textual criticism, a well-timed protest against the anarchy of German and Dutch scholars, and is undoubtedly a valuable contribution to the literature of Theognis; but on the main question the author has taken up a position which is quite untenable, and he has failed to justify the extreme conservatism of his attitude. The best description of the book is contained in the first sentence of the Preface: 'In this book I make bold to maintain that Theognis wrote all or nearly all the poems which are extant under his name.' At the beginning of my article I referred to the presence among the Theognidea of poems from Tyrtaeus, Minnervius, and Solon. Mr. Harrison's second chapter is entitled 'The Methods of Modern Criticism,' and the first part (pp. 100-120) deals with these poems. The author believes that Theognis published them as his own. 'Sometimes Theognis merely appropriates the lines of other poets, with only slight changes; sometimes he incorporates them in his own work; sometimes he gives them a new application by putting them in a new context; sometimes he makes a vital change' (p. 112). Even if this explanation is correct, we are still by no means sure of the real Theognis; for we are confronted with a new difficulty which Mr. Harrison does not appear to have foreseen. A very small portion of early elegiac Greek poetry has survived the attacks of time: small as these remnants are, they still include nine pieces 'borrowed' by Theognis. Are we not therefore justified in assuming that the recovery of all the lost poems of the three poets and their contemporaries would lead to the detection of a great number of 'revised' or 'borrowed' poems in the book of Theognis? And how are we to distinguish these from those which he could justly call his own? We should still have to fall back on the *Kύριον* test and the internal evidence of the poems themselves.

UNIVERSITY COLLEGE OF NORTH WALES, BANGOR.

December 12, 1902.

THE CULTS OF OLBIA.

PART II.

(Continued from Vol. XXII., p. 267).

Aphrodite.

NEITHER literature nor coins bear any witness to the cult of Aphrodite at Olbia, but we have an inscription¹ which is of the highest interest.

[Ἀφρο]δίτῃ Εὐπλοΐαι
[Ποσ]ίδεος Ποσιδείου
χαριστήριον.

This inscription is of the first century after Christ; Posideos the son of Posideos is no doubt the same individual who dedicated offerings at Neapolis² to Zeus Atabyrios, Athene Lindia, and Ἀχιλλεῖ νήσου [μεδέοντι]. Boeckh³ conjectures him to have been a Rhodian, no doubt because of the dedications to Athene Lindia and Zeus Atabyrios, and also because Aphrodite Euploia was worshipped at Cnidus.

This inscription is most important, because the epithet Εὐπλοία is so very rare. Pausanias⁴ in describing the temple to Aphrodite built by Conon in the Peiraeus, near the sea, in honour of his naval victory off Cnidus, says there were three temples of Aphrodite at Cnidus: νεώτατον δὲ ἦν Κνιδίαν οἱ πολλοί, Κνίδιοι δὲ αὐτοὶ καλοῦσιν Εὐπλοίαν.⁵ Pausanias does not say that Conon's temple at the Peiraeus was dedicated to Aphrodite Εὐπλοία, but an inscription discovered in the Peiraeus makes this probable. (We have no epigraphic authority for the title Εὐπλοία as early as the time of Conon). The inscription⁶ reads—

Ἀργεῖος Ἀργείου Τρικο[ρύσιος]
στρατηγῆσας ἐπὶ τῷ Πειρα[ιᾷ]
Ἀφροδίτῃ Εὐπλοΐαι τ[ύχῃ ἀγαθῇ ?]
ἀνέθηκεν.

¹ Latyshev, i. 94.

² Latyshev, i. 242, 243, 244.

³ *C. I. G.* ii. 2103 b.

⁴ i. 1, 3.

⁵ Note that Farnell (*Gk. Cults*, ii. p. 689) supports the view that the Cnidian statue by Praxiteles represented Aphrodite Εὐπλοία.

⁶ *C. I. A.* ii.³ 1206.

The Argæus here mentioned was archon 97—96 B.C.⁷ Besides this inscription and the one at Olbia, there are only two others where this title of Aphrodite occurs. One,⁸ from Aegeae in Cilicia, 1st century B.C., is a dedication to Aphrodite Εὐπλοια together with Poseidon Ἀσφάλειος. The other is from Mylasa,⁹ probably of later date; it refers to ἱερεὺς Ἀφροδίτης Εὐπλοίας. Many cognate titles, however, are known from inscriptions, e.g. at Troezen an inscription¹⁰ of the 3rd century B.C. speaks of τῆς Ἀφροδίτης τῆς ἐμ βάσσαις, and at Panticapaeum, in an inscription of the Roman period,¹¹ we find Aphrodite *Ναυαρχίς* and Poseidon *Σωσίνεος* side by side.¹²

The word ΕΥΠΛΟΙ is found on a gem which represents Eros riding on a dolphin.¹³ Compare with this the inscription on a lamp shaped like a boat¹⁴ with the words, Εὐπλοια λαβέ με τὸν Ἥλιοςέραπιν.¹⁵ Welcker¹⁶ quotes with approval Schneidewin's emendation of Archilochus¹⁷

πολλὰ δ' εὐπλοκάμου Εὐπλοίης ἄλὸς ἐν πελάγεσσιν
θεσσάμενοι γλυκερὸν νόστον.

A more detailed consideration of Aphrodite under this aspect would be out of place here: see Farnell, vol. ii, p. 636—7; 689 et seq.

Aphrodite Ἀπάτουρος.

As the inscription to Aphrodite Εὐπλοια is of late period, reference must be made to inscriptions from other places on the North Euxine which refer to the worship of Aphrodite.

The oldest inscription of Sarmatia,¹⁸ dating from the early part of the 5th century B.C., is a dedication to

ΘΕ-:ΑΓΑΤΟΡΟ

i.e. Aphrodite Ἀπάτουρος. This was found near the river Kuban. At Phanagoria a late inscription¹⁹ refers to Aphrodite Ἀπατουριάς; and there are two that refer to this cult at Panticapaeum; one, perhaps 1st century B.C.,²⁰ contains the words

⁷ Notice Farnell's curious error (*Greek Culls*, ii. p. 733) in dating this inscription in the latter part of the fourth century B.C.

⁸ *C.I.G.* 4443.

⁹ Μουσ. καὶ Βιβλιοθ. Σμύρνης, 1875, p. 50; *B.C.H.* v. 1880, 108; xii. 1888, 30.

¹⁰ Collitz, *Dial.-Inscr.* 3364 b, l. 14.

¹¹ Latyshev, ii. 25.

¹² For this connection with Poseidon compare Paus. vii. 24, 2, πρὸς θαλάσσης Ἀφροδίτης ἱερὸν ἐν Αἰγίῳ καὶ μετ' αὐτὸ Ποσειδῶνος, and also *Compte Rendu* 1881, 134-5; 1877, 246 et seq. with the Atlas, Plate v. No. 1, where Aphrodite appears with a dolphin on a vase. *C.I.G.* 7390, gives the inscription on a black figured vase in which Poseidon appears with a female

in a chariot, Ἀφροδίτης. Ποσειδῶνος. Πυθοκλῆς καλός.

¹³ *C.I.G.* 7309, on which Boeckh comments, 'pertinuit ad navigationem in pelago amoris.'

¹⁴ *C.I.G.* 8514.

¹⁵ Is it worth while to note, in view of the supposition that Posideos was a Rhodian, that the head of the sun appears on this lamp? 'in extrema navicula caput radiatum Solis, quale esse solet in nummis Rhodiorum' (Boeckh).

¹⁶ *Gr. Götterlehre*, ii. p. 706.

¹⁷ *Zeitschr. f. d. Alterth.* 1845. S. 166.

¹⁸ *C.I.G.* ii. 2133, Lat. ii. 469.

¹⁹ Lat. ii. 352.

²⁰ Lat. ii. 19.

ἀνέθηκ[αν τὴν στή]-
λη[ν] Ἀφροδ[ε]ίτῃ Οὐ[ρανί]α Ἀπατού-
[ρ]ου μεδεούσῃ.

This Ἀπάτουρον is referred to by Strabo xi. 495, ἔστι δὲ καὶ ἐν τῇ Φαναγορίᾳ τῆς Ἀφροδίτης ἱερὸν ἐπίσημον τῆς Ἀπατούρου. The other Panticapæum inscription ²¹ is of the Roman period, and gives similar titles. One from Phanagoria ²² of the 4th century B.C. ought perhaps, to be quoted:—

Δήμαρχος Σκύθew
ἀνέθηκεν Ἀφροδίτ[η]
Οὐρανίηι Ἀπατούρο(ν)
μεδεούσῃ
ἄρχοντος
Λεύκωνος Βοσπόρ[ο](ν)
καὶ Θεοδοσίης.

For this aspect of Aphrodite see Preller-Robert,²³ who say, apparently relying on this inscription, that at Phanagoria Aphrodite Apatouros does not seem to have differed from Aphrodite Urania, and remark on the prevalence of the worship of Aphrodite on the Black Sea, in her aspect as goddess of the clan ²⁴; in which connection it is worth noting that a great number of representations of Aphrodite, chiefly in terracotta, have been found in the Tauric Chersonese, one of which, at any rate, will have to be referred to later. Farnell ²⁵ regards this refined cult of the goddess as the patroness of the married life of the clan as a native Greek development. May we press this as additional evidence of the purely Greek character of the colonies on the North Euxine? It may be noted that there was a month in the Ionic calendar called Ἀπατουρεών.²⁶

As to the monumental evidence for this cult, Farnell seems right in saying (p. 705) that we have no sure monumental representation of Aphrodite as the goddess of the clan, or the civic community, unless we accept as genuine the relief upon which appears the inscription Θεο Ἀπατούρο already quoted. This relief represents 'Aphrodite with Eros and Ares; its style is quite out of keeping with the date of the inscription. . . . The sculptor knew no other way of designating her as the clan-goddess, except by adding the figure of Ares for the idea of marriage and of Eros for the idea of love; and without the inscription, no one would recognize in her the goddess Ἀπατούρη.' Stephani, on the other hand,²⁷ regards a relief in terracotta as a representation of Aphrodite Ἀπάτουρος, but apparently this comes about because he considers Ἀπάτουρος and Πάνδημος as interchangeable

²¹ Lat. ii. 28.

²² Lat. ii. 349, *C. I. G.* 2120. Another, Lat. iv. 419 (fourth century B.C.).

²³ *Gr. Myth.* i. p. 378.

²⁴ The word Ἀπάτουρος is of course derived from the Ionic festival of the Apatouria.

²⁵ *Gk. Cults*, ii, p. 656 *et seq.*

²⁶ See references in Pauly-Wissowa, under *Apaturion*. I. p. 2680. One of the Olbian months had this title, Lat. i. 28.

²⁷ *Compte Rendu*, 1859, p. 126. Atlas, plate iv. No. 1, Farnell *Gk. Cults*, ii. p. 686, note.

terms. He describes the relief as representing the goddess wrapped in a chiton, himation, and veil, seated on a goat, running rapidly to the right of the spectator. Two kids gambol below, indicating Aphrodite as the goddess of the generative power. That the goddess is Aphrodite is proved by the presence of Eros behind her, and a dove flying in front. The goddess, he says, is represented in her character of Apatouros or Pandemos. Elsewhere²⁸ he refers to a vase representing Aphrodite on a he-goat as a representation of Aphrodite 'Απάτουρος, and compares the well-known statue by Scopas; but as I should regard Apatouros and Pandemos as separate titles, consideration of these types of Aphrodite would here be out of place.

It is perhaps worth noting that the name Apatourios occurs frequently as a proper name in inscriptions from the North Euxine district, among others in an Olbian one of the fifth century B.C., one of the only two known of so early a date.²⁹

Aphrodite Οὐρανία.

One other title of Aphrodite must be mentioned,—that of Οὐρανία, as it occurs in two inscriptions of Phanagoria³⁰ of the fourth century B.C. and two later ones of Panticapæum.³¹ It may be noted, however, that in all but one of these inscriptions (ii. 347) the title is joined with that of 'Απάτουρος. Here Herodotus may be quoted, who says (iv. 59) that Aphrodite Οὐρανία was one of the special deities worshipped by the Scythians, and that they called her Artimpasa; though, if we are right in believing that Olbia in its earlier period was little affected by Scythian customs, either in religion or anything else, the reference has little point here. Farnell³² says: 'The clearest sign of the Eastern goddess in the Greek community is the title Οὐρανία,' and notes that the worship of the goddess in this aspect is especially found in places which had connection with Asia, instancing Panticapæum as a Milesian colony. It may be worth while here to remark that De Koehne³³ traces the origin of the cult of Helios at Olbia to its connection with Sinope; and the cult of Aphrodite Οὐρανία may have been introduced in a similar way.

In summing up the evidence for the cult of Aphrodite at Olbia, it must be admitted at once that we have no direct testimony except the one late inscription to Aphrodite Εὐπλοία. Still, it is reasonable to suppose that the cult was of some importance at Olbia, as we know that the worship of Aphrodite 'Απάτουρος was prevalent in the North Euxine district; moreover, the number of representations of Aphrodite found there, especially in the Tauric Chersonese, helps to confirm this belief.

²⁸ *Compte Rendu*, 1871, plate v. No. 3, and p. 138, 184.

²⁹ Lat. iv. 28 a.

³⁰ Lat. ii. 343, 347, iv. 419.

³¹ Lat. ii. 19, 28.

³² *Gk. Cults*, ii. p. 629.

³³ *Mus. du P. K.* i. 59.

Artemis.

The evidence for the cult of Artemis at Olbia is of an exactly opposite kind to that for Aphrodite; in the case of Artemis we have testimony from coins, but none from inscriptions. The type is not a very common one on Olbian coins. There is an example in the British Museum (No. 16) which has a head of Artemis on the obverse, and a quiver with strap on the reverse. This seems to be similar to the coin given by Pick.³⁴ Three are given in the Berlin catalogue, Nos. 128-130, not unlike the above. De Koehn³⁵ gives six, but four of these have been sometimes recognized as Demeter; the reverse is a dolphin or a sea-eagle, or both, and there seems to be no special reason for supposing that the head on the obverse is that of Artemis.

Before considering at all the mass of literary material relating to the cult of Artemis on the North Euxine, the inscriptions referring to it had better be mentioned. There is one from Phanagoria of the fourth century B.C.³⁶ which begins

Ξενοκλείδης Πόσιος ἀνέθηκε τὸν ναὸν
'Αρτέμιδι 'Αγροτέραι.

With this may be compared the silver coin of Phanagoria, of the first century B.C., which has on the obverse a head of Artemis Agrotera.³⁷ At Panticapaeum we find an inscription of the fourth century B.C. to Artemis 'Εφεσεΐη, which is interesting as again showing the connection of Panticapaeum with Asia,³⁸ and at Tanais there is one of Roman period, beginning θεῇ 'Αρτέμιδι μεδεούση.³⁹

More interesting, perhaps, are the two inscriptions from Chersonesus,⁴⁰ at which place, as we have already seen, Artemis held the position of city-goddess, and appears on the coins wearing the mural crown.⁴¹ The first inscription, which is of third or second century B.C., is fragmentary, but contains the words τᾶς Παρθένου, and the second, which is a very long decree, has at l. 24 the words ἡ διὰ παντὸς Χερσονασιτᾶν προστατοῦσα Παρθένος, which have already been quoted in comparison with the title Apollo Προστάτης. Further down we have a reference to the Παρθενεΐα held in honour of Artemis, l. 48:

δεδόχθαι τῇ βουλῇ καὶ τῷ δάμῳ στεφαν-
ῶσαι Διόφαντον 'Ασκλαπιοδώρου χρυσέῳ
στεφάνῳ Παρθενεΐοις ἐν τῇ πομπῇ,

³⁴ *Die Antiken Münzen Nord-Griechenlands*, i. 1. Plate X. No. 6.

³⁵ *loc. cit.* pp. 62, 63.

³⁶ *Iat.* ii. 344.

³⁷ *Brit. Mus. Cat. Pontus*, p. 3, Pl. I. 6.

³⁸ *Iat.* ii. 11, Dittenberger, *Syll.*² No. 326, see also, Paus. 4. 31. 8. 'Εφεσίαν δὲ 'Αρτεμιν

πόλεις τε νομίζουσιν αἱ πόλεις καὶ ἀνδρας ἰδίᾳ θεῶν μάλιστα ἄγουσιν ἐν τιμῇ.

³⁹ *Iat.* ii. 421.

⁴⁰ *Iat.* i. 184, 185.

⁴¹ See Berlin Catalogue under *Chersonesus*, and note especially Taf. i. 6.

and l. 51 ,

σταθῆμεν δὲ αὐτοῦ καὶ εἰκόνα χαλκίαν ἔν-
οπλον ἐν τῇ ἀκροπόλει παρὰ τὸν τᾶς Παρθέν-
ου βωμὸν καὶ τὸν τᾶς Χερσονήσου.

An inscription from the Tauric Chersonese⁴² dated probably about 150 B.C. contains the formula of the oath taken by magistrates :

ὁμνύω Δία Γᾶν Ἄλιον Παρθένον θεοὺς Ὀλ-
υμπίους καὶ Ὀλυμπίας.

So we have abundant evidence, even without the literature, for the paramount importance of the cult of Artemis at Chersonesus.

The story of the legendary connection of Artemis with the Tauric Chersonese presents many difficulties. To quote Herodotus first : he says⁴³ that the Tauri sacrifice shipwrecked persons to the Virgin, τὴν δὲ δαίμονα ταύτην τῇ θύουσι λέγουσι αὐτοὶ Ταῦροι Ἰφιγένειαν τὴν Ἀγαμέμνονος εἶναι, on which Stein's comment is 'αὐτοὶ Ταῦροι, nicht die Hellenen.'

Farnell⁴⁴ thinks that the worship of the Tauric Artemis was aboriginal in Attica, and that in any case it cannot have come from the Black Sea originally, as the cult of Brauron points to a very early period, and the Crimea was opened to Greek civilization at a comparatively late time. The worship of Artemis under this aspect seems to have been connected with a very primitive type of idol, and with a vague legend of bloodshed, so he thinks that when the early settlers of the Crimea spread the story of the cruel rites of the native goddess, the similarity of sound in the name of the peninsula and the cult-name at Brauron (probably Ταυροπόλος) caused the identification. Iphigeneia, he thinks, was a local cult-name of Artemis, and he quotes Pausanias,⁴⁵ Ἀρτέμιδος ἐπὶ κλησιν Ἰφιγενείας ἐστὶν ἱερόν ; also Hesychius, s.v. Ἰφιγένεια· ἢ Ἀρτεμις.

However, there is some slight verbal inconsistency, at all events, between this view and that put forward by Farnell himself on the first and second pages of vol. ii.—that the cult of Artemis can be traced back to a prehistoric period, and is found in all the chief places of prehistoric Greek settlement ; from which, and from certain most primitive features of the cult, he infers that it was 'an aboriginal inheritance of the Greek nation.' Then he speaks of its diffusion through the various streams of Greek colonization—'it was implanted at an early time . . . in the Tauric Chersonese.' According to Professor Ridgeway⁴⁶ traces of Mycenaean culture have been found along the shore of South Russia. Would it not then be an admissible conjecture that the barbarous goddess of the Crimea was the lineal descendant of the Artemis worshipped by the inhabitants of the same district in the Mycenaean Age, and that the Brauronian Artemis was the descendant of the same divinity in Greece proper ? Thus we could account for the resemblances between the

⁴² Quoted by Farnell, *Gk. Cults*, ii. 567 from *Revue des Études Grecques*, 1891, p. 338.

⁴³ iv. 103.

⁴⁴ *Greek Cults*, ii. 452, 3.

⁴⁵ ii. 35, 1.

⁴⁶ *Early Age of Greece*, vol. i. p. 182.

two cults. The influence of the literature that sprang up around the story of Iphigeneia would have its effect, as time went on, and the worship became less primitive, in confirming the position of Artemis as chief goddess of the Chersonese, as we have suggested already in the case of Apollo at Olbia, and his mythical connection with the North. The cult of Heracles at Olbia was no doubt affected in the same way by the literature.

We may judge, then, that the cult of Artemis was of some importance at Olbia, even though we have no direct evidence except the few coins quoted. Perhaps, too, we should be justified in thinking that Artemis must have had some share of special honour in a city of which Apollo was the tutelary deity.

Athene.

Athene may be taken next, as the only other female deity for whose worship at Olbia we have any evidence; though her cult has no connection with that of the four preceding goddesses, who are all, under some of their various aspects, more or less linked. There are no inscriptions from Olbia that mention the name of Athene, and only two from the North Euxine district—a dedication to Athene Σώτριά at Chersonesus⁴⁷ of the fourth century B.C., and the dedication to Athene Lindia from Neapolis.⁴⁸ However, this has a certain connection with Olbia, as the dedicator is Posideos the son of Posideos, whom we may conclude to be the same as the man who made the dedication to Aphrodite Εὐπλοία at Olbia.

But Athene and the Gorgon are frequent types on the Olbian coins. It is quite likely that the type of Athene had a commercial rather than a religious origin, since Olbia traded especially with Athens, and the Athenian coins would be familiar at Olbia, as through so large a part of the Greek world. Indeed, it is not improbable that the absence of very early coins of Olbia is due to the use of Athenian money, and (perhaps a little later) of the Cyzicene staters, as the regular circulating medium of Olbia, and that the large cast bronze pieces, to which we shall soon refer, were intended to supply *small* change for home use.⁴⁹ We have some interesting evidence of the money in use at Olbia from an inscription given by Latyshev.⁵⁰ The inscription, which dates from the beginning of the fourth century B.C., is a decree of the people of Olbia for regulating the sale of gold and silver. After decreeing that there shall be free importation and exportation of χρυσίον ἐπίσημον ἢ ἀργύριον ἐπίσημον, the inscription proceeds:

πωλεῖν δὲ καὶ ἀνείσθαι πάντα πρὸς τὸ νόμισμα
τὸ τῆς πόλεως, πρὸς τὸν χαλκὸν καὶ τὸ ἀρ-
γύριον τὸ Ὀλβιοπολιτικόν.

⁴⁷ Lat. iv. 82.

⁴⁸ Lat. i. 243.

⁴⁹ Cp. Lenormant, *La Monnaie dans l'Anti-*

quité, vol. i. p. 157.

⁵⁰ Lat. i. 11.

From this it is clear that there was no gold money of Olbia at this date (though gold coins must have come into use soon afterwards, apparently, as another inscription⁵¹ speaks of 1000 gold pieces); and it might perhaps be conjectured that the copper money was more abundant than the silver, as it is mentioned first, and not in order of value, as in the case of the gold and silver at the beginning. A little further down in the same (i. 11) inscription we have :—

τὸ δὲ χρυσίον πωλεῖν καὶ ὠνεῖσθαι τὸν μὲν
στατήρα τὸν Κυζικηνὸν ἑνδεκα τοῦ ἡμιστά-
τήρου καὶ μήτε ἀξιώτερον μήτε τιμιώτε-
ρον, τὸ δ' ἄλλο χρυσίον τὸ ἐπίσημον
ἅπαν καὶ ἀργύριον τὸ ἐπίσημον πωλεῖν καὶ
ὠνεῖσθαι ὡς ἂν ἀλλήλους πείθωσι.

From the special mention of the Cyzicene staters, we should infer that they were the coins in commonest use at Olbia at this period. But the period of the most active intercourse between Olbia and Athens was the earlier one, before the Peloponnesian War—the trade was probably at its height in the time of Herodotus—and it may well have been that the staple medium of exchange at Olbia in the earlier days was the Athenian coinage. A head of Athene is one of the commonest of the counter-marks on Olbian coins; upon which Prof. Percy Gardner has made (privately) the following interesting comment :—‘ A counter-mark is often put on a coin to show that it is current at some place where it was not struck. Can this mean that the coin passed at some Athenian factory ? ’ We long here for some of the knowledge of the commercial history of the North Euxine that Herodotus would have been so competent to give us. He has told us so much of ancient trade, but so little about Olbia and the Greek colonies of this district, there is hardly a trade-reference bearing upon the North Euxine except that to the Scythians⁵² οἱ οὐκ ἐπὶ σιτήσι σπεύρουσι τὸν σῖτον ἀλλ' ἐπὶ πρήσει.

At all events most numismatists agree that the large cast bronze pieces are among the earliest of Olbian coins,⁵³ and one of the smaller of these pieces⁵⁴ has a very archaic head of Athene on the obverse. Of the Gorgon-head that appears on several of the other coins of this class we will speak later.

The British Museum catalogue does not describe any coin bearing a head of Athene, and the Berlin collection has only one (No. 133), apparently of late period, though from the very sparing use of dates in that otherwise admirable catalogue, it is frequently difficult to decide the exact period to which the editor would assign any given coin. De Koehne (p. 35) gives four of the cast pieces, similar to that quoted above from Pick, and four bronze struck coins (p. 61). Of these, No. 101 appears to be similar to that given

⁵¹ Lat. i. 12. These need not necessarily have been coins of Olbia, but may have been from Panticapaeum or Cyzicus.

⁵² Herod. iv. 17.

⁵³ De Koehne assigns them to the beginning of the fifth century or even earlier.

⁵⁴ Pick, Pl. viii. 1.

by Pick.⁵⁵ It has a head of Pallas on the obverse and an owl on the reverse. The two coins immediately above this in Pick's plate (Nos. 15 and 16) seem also to have heads of Athene; the reverse type on both appears to be an owl. No. 36 in Pick seems to be similar to No. 100 in De Koehne, and to No. 133 in the Berlin collection. The obverse of the Berlin coin shows a head of Pallas, with a branch as counter-mark; on the reverse is a shield and lance. No. 37 in Pick probably represents Athene also; the reverse type is a shield.

This is the principal numismatic evidence for the cult of Athene at Olbia; but the famous medallion found in the North Euxine district,⁵⁶ now in the Hermitage, and representing Athene Parthenos may be also mentioned. It probably came straight from Athens.

No place in the North Euxine district occurs in the register of Athene-cults given by Farnell, but he says⁵⁷—'As in the earliest times we find the worship of Athena in very various parts of the Greek world, we can conclude that she was a primitive Hellenic divinity of the "Achaean" period, and originally worshipped also by the Dorian and Ionic tribes, or adopted by them in their new settlements.' And we know that Athene was worshipped at Miletus, the mother-city of Olbia.⁵⁸ We should of course expect to find Athene held in honour at Miletus, which prided itself on being a colony of Athens, and Miletus in turn would be very likely to transmit the cult to its own colony Olbia, where it would receive a stimulus, if any were needed from the commercial relations between Olbia and Athens.

The Gorgoneion which appears on Olbian coins raises questions of considerable difficulty, both in regard to the type and the deity with which it is connected. The story that Athene herself slew the Medusa is not very early in date; Hesiod does not mention it, and Euripides appears to be the first literary authority for it.⁵⁹ Farnell traces the origin of the story to Athene's interest in Perseus. Furtwängler (in Roscher's *Lexicon*) states that Athene does not appear on the monuments wearing the Gorgoneion earlier than the seventh century, and thinks there is no earlier literary evidence than this that Athene wore it as a badge, or of its use as an element of terror.⁶⁰ Of course the date for the proved association of Athene with the Gorgon is early enough to allow us to regard the Gorgoneion on Olbian coins as an emblem of Athene; but another view would associate it with Apollo. M. Homolle,⁶¹ in an article on a Gorgon found on the base of a statue at Delos, which he explains as a simple ἀποτρόπαιον, thinks that a close relation existed between Apollo and the Gorgon, and quotes Homer *Iliad* xv. 229, 308, (referring to Apollo's use of the aegis), and Macrobius, i. 17. 67. The latter author, in describing a statue of Apollo at Hierapolis

⁵⁵ Pl. x. 17.

⁵⁶ *Myth. and Monum. of Ancient Athens*, Harrison and Verrall, p. 454.

⁵⁷ *Gk. Cults*, i. p. 259.

⁵⁸ Herod. i. 19.

⁵⁹ *Ion*, 987 *et seq.*

⁶⁰ He regards the two references to the Gorgoneion in the *Iliad*. (xi. 35-6, v. 741) as interpolations.

⁶¹ *Bull. Corr. Hell.* xii. (1888), p. 471. Pl. xii.

says 'Summisque ab humeris gorgoneum velamentum redimitum anguibus tegit scapulas.' M. Homolle remarks that the Gorgon appears on coins with emblems of Apollo, and cites as example the dolphin on Olbian coins. But this seems hardly conclusive, as it has been already seen that the dolphin (or fish-type) occurs on coins of Olbia with deities other than Apollo, *e.g.*, those whose obverse type is a head of Demeter. The question can probably not be decided, but the fact that on the large bronze coins of Olbia the only types are Athene and the Gorgon (including for the moment the beautiful head that appears on the latest of these coins) would seem to be of some weight in guiding us to associate the Gorgoneion on these coins with Athene rather than with Apollo. If we have been right in laying stress on Athenian



FIG. 7.—BRONZE COIN OF OLBIA IN THE BRITISH MUSEUM.

influence in the adoption of Athene as a coin-type at Olbia, this would be another indication in the same direction.

The consideration of the type of the Gorgoneion presents equal difficulties. It seems to have been borrowed from the East about the end of the eighth or beginning of the seventh century B.C.; the earliest example known is a plaque from Cameiros of the seventh century.⁶² The early Gorgons were all of the hideous type, which passed through a period of transition before a beautiful type was elaborated. A series of bronzes discovered on the Acropolis at Athens illustrates these changes; the middle type began at Athens before 480 B.C.⁶³ It is found on the Euxine before 450 B.C. in the valley of the Kuban.⁶⁴ This type grew common in the second half of the

⁶² Daremberg-Saglio, Fig. 3633.

⁶³ Daremb.-Sagl., Fig. 3639.

⁶⁴ *Compte Rendu*, 1877, Pl. ii. 1, and p. 7.

fifth century.⁶⁵ It should be noted that a type of Gorgoneion like that from the Kuban is found in the Crimea down to the fourth century.⁶⁶ Gold Gorgons were found at Kertsch in graves of the fifth century. The beautiful type of Gorgon's head appears in the fifth century, and becomes common in the fourth; the calm style first, and later the pathetic.⁶⁷

Notwithstanding, however, the undoubted evolution of a more attractive type of Gorgon, I have never been able to feel that the beautiful head on the coin given by Pick⁶⁸ can be a Gorgon. I was glad to find that I had the support of Professor Percy Gardner in this view. He points out (in a private letter) that the wing is wanting. But he has no identification for the type, though he suggests very tentatively a nymph (?). This suggestion seems well worth consideration; anyone who looks at the various full-faced



FIG. 8.—BRONZE COIN OF OLBIA IN THE BRITISH MUSEUM.

heads of nymphs given in Professor Gardner's 'Types of Greek Coins' cannot fail to be struck by the resemblance they bear to the head on this large coin of Olbia. Examine first the head of Arethusa, by the artist Cimon, on a coin of Syracuse,⁶⁹ then the nymph on a coin of Larissa,⁷⁰ and another on a coin of Cyzicus.⁷¹ Certainly the resemblance between these

⁶⁵ See *J.H.S.* xiii. 1892, p. 236, Fig. 4; p. 238, Fig. 10. (note that here Fig. 4 is assigned to the sixth century).

⁶⁶ *Antiq. du Bosp. Cimm.* Pl. xxi. 12, etc.

⁶⁷ An example of the beautiful head, without wings, is given in *Compte Rendu*, 1876, Pl. iii. 28, p. 147.

⁶⁸ *loc. cit.* Pl. viii. 4. It is given in the

Berlin Catalogue, p. 19. A specimen has been added to the British Museum collection since the publication of the catalogue of Olbian coins, and is given in the accompanying Fig. 7.

⁶⁹ *Types of Greek Coins*, Pl. vi. 22.

⁷⁰ *ibid.* Pl. vii. 35.

⁷¹ *ibid.* Pl. x. 46.

heads and that on the Olbian coin is close enough to justify a tentative identification of the latter as a nymph,⁷² thus avoiding the (to my mind) impossible assignation of the type to the Gorgon. I may quote the description of the similar example in the Berlin catalogue No. 2 :—

<i>Obverse.</i>	<i>Reverse.</i>
Female head facing, with flying hair and bead necklace, of good style. Æ 17½	ΟΛΒΙΗ, ⁷³ Eagle on Dolphin, l. head turned to r. with outspread wings. Below Γ or similar letter. ⁷⁴

It will at once be noted that von Sallet in the Berlin catalogue (published 1888) only describes this type as a female head; though the year before in describing this coin⁷⁵ he calls it 'a good specimen of the very rare large cast coins or tokens of Olbia with the female head (Gorgo?) and eagle, of fine style.' It seems fair to conclude from this that in the catalogue von Sallet gives up his doubtful attribution of the previous year. It is also worth noting that he puts this coin *between* No. 1, described as follows (No. 3 in Pick) :—

<i>Obverse.</i>	<i>Reverse.</i>
Gorgoneion facing, of archaic style, with tongue protruded. ⁷⁶	ΑΠΙΧ with eagle r. which with outstretched wings stands on dolphin. Æ 17½.

and No. 3 (No. 2 in Pick) :—

<i>Obverse.</i>	<i>Reverse.</i>
Gorgoneion facing, of archaic style, with tongue protruded.	ΑΠΙΧ in the open spaces of a wheel with four spokes.

(Nos. 4–12 are smaller coins, with more or less similar types.)

If this arrangement is to be regarded as chronological (an uncertain point, from the scarcity of dates in the catalogue, already alluded to), then surely the attribution of the type to the Gorgon becomes impossible, or at least improbable. It is unlikely that two heads of such wholly different types could be in circulation at the same moment in the same city, and be recognized as representing the same object. It should be noted that the Berlin catalogue describes a coin which does not appear in Pick's illustrations (No. 13) :—

<i>Obverse.</i>	<i>Reverse.</i>
Gorgoneion, tongue not protruded, of old style.	ΟΑ . Ι Eagle with raised wings on dolphin, l. Æ 11.

No. 14 is similar.

⁷² On the coins bearing full-face heads of Nymphs, the representatives of a very large class, see Gardner, *loc. cit.* p. 154.

⁷³ Note the occurrence of the town-name in this form.

⁷⁴ De Koehne (p. 35, No. 6) describes a similar

coin as 'Tête de Méduse, d'un style plus moderne et avec une belle expression.'

⁷⁵ *Zeitschr. f. Num.* xiv. 1887, p. 5.

⁷⁶ Cp. similar coin (not the same) in accompanying Fig. 8.

All the above-mentioned coins are large bronze cast pieces. One other coin, a silver one of rather later period, is thus described in the Berlin catalogue, No. 36 :—

<i>Obverse.</i>		<i>Reverse.</i>
Gorgon's head facing, apparently without protruded tongue. ⁷⁷	|	OABIO over a dolphin, l. Below KPI R 2.

Note also that De Koehne⁷⁸ assigns this coin to the beginning of the third century (which is not very different from the date one would conjecture from its position in the Berlin catalogue). Does not this add to the difficulty of regarding the beautiful head on the bronze coin, which is almost certainly of earlier date, as a Gorgon ?

Zeus.

The consideration of the cult of Zeus at Olbia must not be deferred longer. At Olbia it seems essential to take Apollo first, and Demeter has a claim to the second position, and then it is most convenient to treat of the other female deities in close connection ; so that this seems the place where Zeus may properly be considered. Farnell⁷⁹ may be referred to for some general remarks as to the absence from the monuments of Zeus of distinctive cult-attributes, for his cult was Hellenic pre-eminently, and not local. So we do not expect to have at Olbia titles of such special interest in the case of Zeus as in that of some other gods, though there is at any rate one striking exception in the case of Zeus *Ὀλβιος*.

The first Olbian inscription which bears the name of Zeus is Lat. i. 12, a decree granting 1000 gold pieces and a statue to Kallinikos the son of Euxenos (dated by Latyshev in the fourth century B.C.) which ends : *ὁ δῆμος Διὶ Σωτήρι*. The name of Zeus *Σωτήρ* also occurs in two other inscriptions of Olbia, but one⁸⁰ is of the second century after Christ, and the other⁸¹ is a mere fragment.

Lat. i. 91 is a dedication to Zeus *Σωτήρ* by a private individual of

*εὐχαριστήριον ὑπὲρ εἰρήνης καὶ σωτηρίας
τῆς πόλεως.*

With this may be compared an inscription from Chersonesus⁸² (second century after Christ) where some one whose name is lost

*τὸ τεῖχος ὠικοδόμησεν ἐκ τῶν ἰδίων
Διὶ Σωτήρι ὑπὲρ ἑαυτοῦ καὶ τῆς πόλεως
εὐσταθείας.*

⁷⁷ Is this the same coin as Pick's example, Pl. x. 10 ?

⁷⁸ Given by De Koehne, *loc. cit.* p. 42 No. 3.

⁷⁹ *Gk. Culla*, i. p. 121, 61.

⁸⁰ Lat. i. 91.

⁸¹ Lat. i. 92.

⁸² Lat. i. 202.

There is one from Panticapaeum⁸³ where the name of Zeus Σωτήρ is joined with Ἡρα Σώτειρα;⁸⁴ it is of the imperial period, and the dedication is made

ὑπὲρ βασιλέως Τειράνου νείκης.⁸⁵

There is a fragmentary inscription of the third century B.C. to Zeus Ἐλευθέριος,⁸⁶ a well-known cult-title of Zeus, though not occurring elsewhere in the North Euxine district.

The name of Zeus Βασιλεύς occurs in an inscription given by Latyshev⁸⁷ and assigned by him to the third century B.C. :—

[ὁ δῆμος] Εὐρησίβιον Δημητρίου Διὶ Βασιλεῖ
[ἀρετῆς] ἔνεκεν καὶ εὐνοίας τῆς εἰς αὐτόν.⁸⁸

A tower is dedicated to Zeus Πολιάρχης in an inscription given by Latyshev,⁸⁹ assigned by him to the second century after Christ. Farnell⁹⁰ says '(?) third century B.C.' without explaining his reason for the date. This is the only instance he gives of this title, but the cognate one of Zeus Πολιεὺς occurs in many places, notably at Athens. The cult expressed the union of the State.

Perhaps, however, the most interesting title of Zeus for the present enquiry is that of Ὀλβιος, which occurs in an inscription given by Latyshev⁹¹ and assigned by him to the reign of Septimius Severus, 193–211 A.D. It is a decree in honour of Kallisthenes,

ἱερεὺς δὲ γενόμενος τοῦ προεστῶτος τῆς
πόλεως ἡμῶν θεοῦ Διὸς Ὀλβίου.

This title receives rather curious treatment from Farnell. He says⁹² 'Not only was Zeus the guardian of kingship, but also the protector of the family property, and worshipped as Zeus Κτήσιος This worship was especially Attic; we find the similar cults of Zeus Πλούσιος in Sparta (Paus. iii. 19. 7) and Zeus Ὀλβιος in Cilicia.' For this latter he quotes an inscription, *circa* 200 B.C., given by Canon Hicks :—⁹³

Διὶ Ὀλβίῳ ἱερεὺς Τεῦκρος Ταρκυάριος.

But this is apparently explained by Canon Hicks himself as referring to the priest-kings of *Olba*, and rather as a local than descriptive epithet. The

⁸³ Lat. ii. 29.

⁸⁴ Cp. the dedication to Athens Σώτειρα at Chersonesus, fourth century B.C., Lat. iv. 82.

⁸⁵ Note that Farnell does not quote any of the above inscriptions in his geographical register.

⁸⁶ Lat. iv. 458.

⁸⁷ i. 105.

⁸⁸ For other references to cult of Zeus Βασί-

λέως, see Pauly-Wissowa, *Real.-Encycl.* iii. p. 82, and especially Mr. Greenwell's article, *J.H.S.* vol. ii. p. 78.

⁸⁹ Lat. i. 101.

⁹⁰ *Gk. Cults*, i. p. 161.

⁹¹ Lat. i. 21.

⁹² *Gk. Cults*, i. p. 55.

⁹³ *J.H.S.* 1891, p. 226.

only other reference given by Farnell (he does not mention this inscription from Olbia at all) is *C.I.G.* 2017, a decree from the Thracian Chersonese:—

Κάλλιστος ὑπὲρ τοῦ υἱοῦ Ἀλεξάνδρου Διὶ
ὀλβίῳ εὐχαριστήριον.

on which Boeckh's comment is 'Ζεὺς ὀλβιος non notus.' In this last-mentioned inscription it would seem natural to consider ὀλβιος as a descriptive epithet, and justifiable to compare it with κτήσιος; but surely at both Olbia and Olba it must be primarily a local epithet, with no doubt a play upon the meaning of the word. Preller-Robert⁹⁴ say, in commenting on *Lat.* i. 24, 'Ζεὺς Ὀλβιος seems to be the city god of Olbia.' This again can hardly be correct in the ordinary meaning of the term; we have seen that Apollo was the regular civic deity of Olbia; it would seem to be more exact to say: Ὀλβιος, a name under which Zeus was worshipped at Olbia.⁹⁵

The above titles of Zeus are all that occur in Olbian inscriptions, but one from Neapolis⁹⁶ may also be quoted:—

Διὶ Ἀταβυρίῳ Ποσίδεος Ποσιδέου χαριστήριον.

This Posideos is no doubt the same man who made the dedication to Aphrodite Εὐπλοία at Olbia. Atabyron was a mountain in Rhodes ἐξ οὗ ὁ Ζεὺς Ἀταβύριος (*Steph. Byz.*). Athens was worshipped with Zeus Atabyrios at Agrigentum.⁹⁷ Preller-Robert⁹⁸ quote Pindar, *Ol.* vii. 87:—

Ζεὺ πάτερ νώτοισιν Ἀταβυρίου μεδέων.

The coins of Olbia which have Zeus as type are neither very numerous nor very interesting. The first given by Pick is Plate xi. No. 3, apparently the same coin as No. 125 in the Berlin catalogue. On the obverse is a laureate head of Zeus; on the reverse is a sceptre ending like a spear below, above, in a lily (or lotus?).

This reverse type is rather curiously described by De Koehne⁹⁹ as 'Flèche, la pointe en bas,' but the object certainly does not much resemble an arrow in Pick's plate. De Koehne also says that the coin probably represents Zeus Soter, but gives no reason for the identification. Nos. 126, 127, in the Berlin catalogue are similar; it is to be assumed from their arrangement both here and in Pick that they are of somewhat late date. The next coin given by Pick¹⁰⁰ has a very fine head of Zeus as the obverse type, and on the reverse an eagle with outspread wings, both apparently in

⁹⁴ (*Gr. Myth.*) l². 867.

⁹⁵ See *Brit. Mus. Cat. of Coins*, Lycæonia, p. lvi. note, "Ὀλβιος, a well-known epithet of Zeus, would mean (1) the god of prosperity, (2) the god of Olba," [or in this case of Olbia]. 'The abstract idea of prosperity is represented by the concrete god Zeus Olbios.' The coins of Olba with throne and thunderbolt of Zeus

Olbios date probably at the end of the first century B.C. and the beginning of the next.

⁹⁶ *Lat.* i. 242.

⁹⁷ Welcker, *Gr. G.* ii. 282, Polyb. xi. 27.

⁹⁸ *Gr. Myth.* i.¹ 136.

⁹⁹ *loc. cit.* p. 59.

¹⁰⁰ Pl. xi. 4.

rather high relief. Coin No. 5 is similar to (though not the same as) No. 63 in the Berlin Catalogue, which only differs from Pick's coin in having a caduceus as counter-mark on the cheek of Zeus, whose head is the obverse type. The reverse type is an eagle. Coin No. 6 shows the caduceus in front of the head of Zeus. Several Imperial coins representing Zeus seated are described by De Koehne, but only one¹⁰¹ appears in Pick's plates.¹⁰² On the obverse is a seated figure holding a sceptre, on the reverse a standing figure of Fortune, with a horn of plenty and a rudder. Perhaps the sceptre causes De Koehne to identify the type as Zeus: it is described as Apollo in the Berlin catalogue (No. 134).¹⁰³

Hermes.

Hermes may be considered next, as he appears both in inscriptions and on coins of Olbia. Hermes and Apollo were often worshipped side by side, as a brother-pair—Apollo as mouthpiece and prophet of Zeus, Hermes as his outstretched right hand; and so the two stood together in streets and before doors—Apollo as *Ἀγυιεύς*, Hermes as *Ἐνόδιος*.¹⁰⁴ So we should expect to find some testimony to the cult of Hermes at Olbia, where Apollo held such a high position. He was the god of trade, markets, and commerce, both by land and sea; therefore a statue of Hermes *Ἀγοραῖος* (whom we shall find mentioned in two Olbian inscriptions) stood in the market-place of every important town.

The earliest inscription found at Olbia referring to Hermes is of the third century B.C.,¹⁰⁵ and begins:

[Νικόδρο]μος Διονυσίου [γυμνασ]μαρχήσας
[τὸν νύ]δον (?) Διονύσιον Ἑρμ[ῆ] καὶ Ἡρακλεῖ.

This would appear to be a dedication to Hermes in his character of *ἀγώνιος*.¹⁰⁶

Hermes Agoraios was the god to whom the aediles (*ἀγορανόμοι*) of Olbia made offerings. Two of these dedicatory inscriptions have come down to us.¹⁰⁷ It is worth while to quote Latyshev's description of the carving above the first of these inscriptions: 'Super titulo Fortunae rota incisa est, infra manu admodum rudi Mercurii protome, dextra marsupium tenentis, sinistra caduceum, utrimque foliola e quibus id, quod ad dextram spectanti est, caput humanum in medio incisum habet.' The end of the inscription may be quoted—after the names of the *ἀγορανόμοι* :—

Ἑρμῇ Ἀγοραῖω ἀνέθηκαν Νείκην ἀργυρέαν
ὑπὲρ τῆς πόλεως εὐσταθίας καὶ τῆς
ἐαυτῶν υἱείας.

¹⁰¹ De Koehne, *loc. cit.* p. 88.

¹⁰² Pl. xi. 22.

¹⁰³ If the attribution to Zeus is accepted, might it be considered as a representation of Zeus *Ὀλβιος*, in consideration of the reverse type?

¹⁰⁴ Preller-Robert, *Gr. Myth.* i. 385.

¹⁰⁵ Lat. iv. 459.

¹⁰⁶ For references to other places where Hermes and Heracles appear together, see Preller-Robert, i. p. 415. n. 4.

¹⁰⁷ Lat. i. 75. 76.

The second inscription only differs in the names of the archon and ἀγορεύοι. Both are of quite late period.

Two coins representing Hermes are given by Pick; ¹⁰⁸ there are none in the Berlin collection. Both of Pick's coins have a head of Hermes wearing a petasos as obverse type, but the heads are quite different. No. 32 is very badly struck; if the coin were divided into four quarters, the head would fill little more than the lower quarter at the left; the petasos is much flatter, and more distinct than in No. 33. No. 33 has also a branch as countermark behind the head. Both these coins have a winged caduceus as reverse type.

There is another coin which may be referred to here, that of the Scythian king Inismeus, given by Pick, ¹⁰⁹ with a turreted female head (Tyche of Olbia) as reverse type. It is described by De Koehne ¹¹⁰ as having a bearded head of Hermes on the obverse, but the type has none of the characteristics of Hermes, and it is more likely to be a portrait of the king Inismeus. De Koehne assigns this coin to the period of the reconstruction of Olbia, *i.e.*, between 60 B.C. and 193 A.D.

Poseidon.

Strictly speaking, Poseidon can hardly claim to be considered as having a cult at Olbia at all, as no inscriptions bear his name, and it is doubtful whether he is represented on the coins. However, there is an interesting inscription from Panticapaeum, ¹¹¹ in which Πανταλέων ναύαρχος makes a dedication

Ποσιδῶνι Σωσινέ[ω]ι καὶ Ἀφροδίτῃ Ναυαρχίδι,

on which Latyshev's comment is,—'Dei et deae epitheta, quae in titulo leguntur, primum hic videntur innotuisse.' This connection of Poseidon with Aphrodite has already been referred to under Aphrodite Εὐπλοία.

De Koehne ¹¹² gives two coins which he considers represent Poseidon. The first (No. 43) he describes as follows:—

<i>Obverse.</i>	<i>Reverse.</i>
Tête de Poseidon.	Hache, Goryte, Carquois.

He admits, however, that the head might be identified as Zeus. But surely the presence of the battle-axe and bow in case on the reverse makes its identification as the Borysthènes more likely. ¹¹³

The other coin quoted by De Koehne (No. 44) appears to be that given by Pick (Pl. ix. 24). It is thus described by De Koehne:—

¹⁰⁸ Pl. x. 32. 33. See also De Koehne, *loc. cit.*
i. p. 66.

¹⁰⁹ Pl. xii 9.

¹¹⁰ *loc. cit.* i. 71.

¹¹¹ Lat. ii. 25.

¹¹² *loc. cit.* p. 44. 45.

¹¹³ This is apparently the coin given by Pick, Pl. ix. 32.

Obverse.

Tête de Poseidon, à gauche.

*Reverse.*ΟΛΒΙ. Dauphin, à gauche, en bas,
ΦΟ.

If it were not for the dolphin on the reverse, this head might easily be taken for the river-god, (and indeed this attribution is suggested in the Berlin catalogue, No. 66) as the forehead, where the horns would come, is indistinct. But as the series of Borysthene coins has a battle-axe and bow in case as reverse type, it seems possible to assign this head to Poseidon. His cult would be likely to be of some importance as Olbia, both because it was a maritime town, and because in Ionia the worship of Poseidon held a chief place.¹¹⁴

Dionysus.

There is no doubt about the right of Dionysus to a place among the cult-deities of Olbia, as we have Herodotus' ¹¹⁵ authority for the fact of the celebration of his mysteries there, for through this came about the death of the Scythian king Scyles.

Also there is an inscription referring to the Dionysia at Olbia, the decree in honour of Kallinikos ¹¹⁶ already referred to, which concludes:—

τὸν δὲ στέφανον ἀναγορευθῆναι
τοῖς Διονυσίοις ἐν τῷ θεάτρῳ.

This decree is assigned by Latyshev to the fourth century B.C. The name of Dionysus also occurs in two Panticapaeum inscriptions.¹¹⁷ The latter is especially interesting; it consists of the words,

Διονύσω[ι]
'Α]ρείῳ.

This title of Dionysus was only known before from an Orphic hymn (30. 4); Latyshev dates the inscription, (which was found in 1892), in the fourth century B.C.

It is perhaps surprising that Dionysus does not appear on Olbian coins; but on the vase-paintings found in this region Dionysus and Ariadne and kindred subjects are of frequent occurrence.¹¹⁸

¹¹⁴ Among other references may be given Herod. i. 148, Paus. vii. 24. 5, (Frazer's note), *Mitt. d. Arch. Inst.* 10. (1885), p. 32, *Bull. Corr. Hell.* 13. (1889), p. 279.

¹¹⁵ Herod. iv. 78, 79.—an important passage in many ways, illustrating as it does the high degree of Greek civilization attained at Olbia, and the impression it produced on the Scythian king. Rawlinson (*ad. loc.*) says, 'The Milesian

colonists seem to have carried the worship of the Phrygian Bacchus (Sabazius) to Olbia. Hence Olbia itself was called *Σαβία* or *Σαβία*, (Peripl. P. Eux. p. 151)'—surely a most improbable derivation.

¹¹⁶ Lat. i. 12.

¹¹⁷ Lat. ii. 18, iv. 199.

¹¹⁸ *Compte Rendu (passim)* and *Antiq. Bosp. Cimm. s.g.* Pl. lx.

Ares.

The claim of Ares to a place in this discussion is doubtful. We have the well-known passage of Herodotus,¹¹⁹ already referred to,—the temple of brushwood and the worship of the ancient sword. But in the first place it is by no means certain that this was a worship of Ares at all; it sounds much more like a savage sword-worship; and in the second, even if it were proved that Ares was a special object of cult among the Scythians, it would still not follow that such was the case at Olbia also. Nor are there any Olbian inscriptions which refer to Ares.

However, there is some numismatic evidence for the cult. Three coins are given in the Berlin catalogue (Nos. 136–138), with a standing figure of



FIG. 9.—BRONZE COIN OF OLBIA IN THE BERLIN MUSEUM.

Ares as a reverse type. The first of these coins, No. 136, is reproduced here (Fig. 9).¹²⁰ The reverse is thus described in the Berlin catalogue:—

ΟΛΒΙΟΠ ΟΛΕΙΤΩΝ. Ares, standing, r., left hand leaning on lance. A in field to left.

There is a bust of Geta on the obverse; the other two Berlin coins are similar. This coin De Koehne¹²¹ thinks represents the temple-statue of Achilles Pontarches, but there does not seem any ground for the assignation. Another coin given by Pick,¹²² which does not appear in the Berlin catalogue, is also assigned to Achilles by De Koehne, but the figure, which is standing and holding a lance, seems more likely to be Ares. It looks like the copy of an archaic statue. The reverse type of this coin is a caduceus. These coins are all of late period.

Helios.

There is some very interesting numismatic evidence for the existence of this cult at Olbia. Coin No. 114¹²³ in the Berlin Catalogue is thus described:—

<i>Obverse.</i>	<i>Reverse.</i>
Head of Helios, facing, with rays.	ΟΛ above two fore-parts of horses
Æ 5.	set back to back.

¹¹⁹ Herod. iv. 59, 62.

¹²⁰ The cast from which this photograph was made, was obtained through the kindness of Dr. H. Dressel, of the Royal Museum at Berlin, as were others referred to below.

It appears in Pick's plates (xii. i.).

¹²¹ *Loc. cit.* i. p. 84.

¹²² Pl. xi. 21.

¹²³ Nos. 115, 116 are similar.

This coin is given by Pick; ¹²⁴ it is apparently of rather early date. Von Sallet comments that these coins show traces of the rise of another type at Olbia. De Koehne ¹²⁵ also describes them, and says that they are the only record we have of a cult of Helios here. ¹²⁶ He thinks that this cult was introduced from Sinope to Olbia; as a coin of Sinope ¹²⁷ has a head of Helios, and on another coin a head with $\Sigma\text{IN}\Omega\text{Π}[\text{ΕΩΝ}]$ between the rays occurs as counter-mark. ¹²⁸ It would seem more probable that the worship was introduced from Rhodes, ¹²⁹ the special home of the cult of Helios. We have an apparent instance of the intimate relations between the two states at a rather later period in the inscriptions set up by Posideos which have been so often referred to. Another proof of the commercial intercourse between Rhodes and Olbia is the fact that jar-handles have been found near the latter city stamped with the name of Rhodes; ¹³⁰ as these, however, have been found in almost every part of the Greek world, the argument from them cannot be pressed.

There are no Olbian inscriptions which show the name of Helios, but there is one from Panticapaeum ¹³¹ of late period, and one from Gorgippia, ¹³² of 41 A.D., both of which relate to the manumission of slaves. In each of these the same formula occurs.—

ὑπὸ Δία, Γῆν, Ἥλιον.

For this formula Latyshev ¹³³ compares an inscription from Thermae in Aetolia, ¹³⁴ which also refers to the manumission of a slave.

The Dioscuri.

Head ¹³⁵ says that the worship of the Dioscuri was very prevalent on the shores of the Euxine. We have two pieces of evidence for the existence of the cult at Olbia. One is a marble tablet, on which is a fragmentary inscription of the third or second century B.C. ¹³⁶ Above the inscription are the two caps of the Dioscuri, and half a star, with apparently the remains of another half. The other is a coin, given by Pick (Pl. X. 31), of which there are two examples in the Berlin Catalogue (No. 67, 68). The reverse of this coin shows a dolphin between the caps of the Dioscuri, and above a

¹²⁴ Pl. ix. 31.

¹²⁵ *loc.cit.* p. 58, 59.

¹²⁶ Note that the Berlin catalogue gives a coin, No. 32, with Heracles as a reverse type, and 'over the head a small round counter-mark with youthful Helios-head with rays.'

¹²⁷ Mionnet, Suppl. iv. p. 574, 131.

¹²⁸ *British Museum Catalogue*, 'Pontus,' Pl. xvii. 15 (date *circa*. B.C. 290-250).

¹²⁹ But note the possible adoption from Sinope of the eagle standing on fish, as reverse type, referred to under Demeter.

¹³⁰ Büchsenenschütz, *Besitz und Erwerb*, p. 422-4. See *Inscr. Graec. Insul. Maris Aeg.* i. p. 175, (appendix on Rhodian jar-handles), also an exhaustive article by Becker, (*Mélanges Gréco-Rom.* vol. i. p. 416).

¹³¹ Lat. ii. 54.

¹³² Lat. ii. 400.

¹³³ i. 98.

¹³⁴ Dittenberger, *Syll.* ii. 837 (2nd edit.).

¹³⁵ *Historia Numorum*, p. 235, (under Istros).

¹³⁶ Latyshev, i. 18, *U.I.G.* ii. add. p. 1000. No. 2083. b.

large star. De Koehne¹³⁷ explains the dolphin as emblematic of the connection of the Dioscuri with the sea as the protectors of mariners. He gives several coins of Panticapaeum which bear their symbols; they also appear very frequently on the coins of Tanais, and of Dioscurias in Colchis. From their connection with navigation, too well known to require illustration, we should naturally expect to find a cult of the Dioscuri at Olbia, and the marble and the coin supply sufficient confirmatory evidence.

The Cabiri.

The Cabiri must be taken next to the Dioscuri, in view of their close relationship. A very interesting inscription relating to this cult at Olbia was discovered in 1897.¹³⁸ It is on a base of white marble, and is assigned by Latyshev to the second century B.C. It is as follows:—

Εὐβίотος Ἀρίστωνος
Ἐπικράτη(ν) Νικηράτου
τὸν θεῖον
θεοῖς τοῖς ἐν Σαμοθράκη[ι]
ἱερησάμενον.

This is the only mention of the cult of the Cabiri at Olbia, and apparently in the whole North Euxine district, so it is of special importance. A cult of the Cabiri at Miletus is known,¹³⁹ apparently in the temple of the Didymaeon Apollo, and it may have come to Olbia from the mother city; or direct from Samothrace, as the form of the inscription (θεοῖς τοῖς ἐν Σαμοθράκη[ι]) would suggest. We have seen that Demeter, Hermes, and Dionysus, and possibly the Dioscuri, were all objects of cult at Olbia, and as these deities were bound up with the Samothracian worship it is natural that a cult of the Cabiri should be found there also.

Asklepios.

There are two pieces of evidence for the existence of a cult of Asklepios at Olbia. The first is merely incidental,—the reference in the Protogenes decree¹⁴⁰ to τὸν [πύργον] Ἐπιδαυρίου, from which it has been supposed that there was a temple of Asklepios near by, which gave its name to the tower. The other,—the bas-relief found at Olbia, and referred to by De Koehne¹⁴¹—is more important. Mr. Rouse¹⁴² conjecturally suggests that the seated

¹³⁷ *loc. cit.* p. 57.

¹³⁸ *Lat. iv.* 27. Note that Latyshev thinks the absence of the (ν) in the 2nd. line is the stone-cutter's error, as it would be unusual for the uncle's name to be omitted.

¹³⁹ *C.I.G.* 2882.

¹⁴⁰ *Lat. i.* 16, B. 46.

¹⁴¹ *loc. cit.* p. 7. The relief is given by Uvarov *Recherches sur les Antiquités de la Russie méridionale*, 120, Taf. 13.

¹⁴² *Greek Votive Offerings*, p. 20. Mr. Rouse is here following the author of the article *Heros* in Roscher's *Lexicon* (i. 2571), who suggests the attribution of the relief to Achilles.

figure in this relief is Achilles. But an examination seems to make this impossible; on the wall hangs the representation of a human trunk,¹⁴³ apparently dedicated as a votive offering. This is surely decisive in favour of regarding Asklepios as the subject of the relief. Uvarov considered this relief as the most important work of the kind found at Olbia. These two items of evidence seem enough to make good the claim of Asklepios to a place among the cult deities of Olbia, which his close connection with Apollo would make probable even without such direct testimony.

We have two inscriptions from the Euxine district referring to Asklepios; one, of Roman period, from Chersonesus,¹⁴⁴ directs that a copy of the decree shall be placed

ἐν τῷ ἱερῷ τοῦ Ἀσκληπιοῦ.

The other is from Panticapaeum,¹⁴⁵ and may be quoted in full.

Θεῷ Ἀσκληπιῷ σωτῆρι καὶ εὐεργέτῃ
τὴν τράπεζαν ἀνέστησε Στρατόδημος
Μερεστράτου.

Achilles Pontarches.

The question as to whether the cult of Achilles Pontarches at Olbia was of Greek or Scythian origin has been already discussed in the Introduction; it remains now to deal with the epigraphic and other evidence for the existence of the cult at Olbia. Dion Chrysostom¹⁴⁶ is the literary authority for this; he says:—τοῦτον [*i.e.* Achilles] μὲν γὰρ ὑπερφυῶς τιμῶσι, καὶ νεῶν τὸν μὲν ἐν τῇ νήσῳ τῇ Ἀχιλλέως καλουμένη ἴδρυνται, τὸν δὲ ἐν τῇ πόλει, ὥστε οὐδὲ ἀκούειν ὑπὲρ οὐδενὸς ἄλλου θέλουσιν ἢ Ὀμήρου. καὶ τᾶλλα οὐκέτι σαφῶς ἐλληνίζοντες διὰ τὸ ἐν μέσοις οἰκεῖν τοῖς βαρβάροις ὅμως τὴν γε Ἰλίουδα ὁλίγου πάντες ἴσασι ἀπὸ στόματος. It is not quite clear whether Dio here means by 'the island of Achilles' Leuke or Berezan, a small island at the mouth of the Borysthenes. Escher¹⁴⁷ and Fleischer¹⁴⁸ both take the view that Berezan is meant,¹⁴⁹ and it seems on the whole more likely. There was, of course, also a temple on the island of Leuke. Leuke and Berezan have constantly been confused, both by ancient and modern writers, with each other, and with the δρόμος Ἀχιλλέως,—a narrow tongue of land south of Olbia and the mouth of the Borysthenes, with its west end in the sea, and its east in a bay, and only joined to the mainland by a narrow strip

¹⁴³ See Mr. Ronso himself, *loc. cit.* p. 210-212, on the custom 'of dedicating models of the diseased part. . . Votive eyes. . . make up two-fifths of the whole number. Next to the eye comes the trunk.'

¹⁴⁴ Lat. i. 189.

¹⁴⁵ Lat. ii. 30.

¹⁴⁶ Orat. xxxvi. 439. M.

¹⁴⁷ In Pauly-Wissowa, *Real.-Encycl.* s. v.

Achilleus.

¹⁴⁸ In Roscher's *Lex.* s. v. Achilleus.

¹⁴⁹ This is the view of Koehler, but Latyshev thinks Leuke is meant (*op. cit.* i. p. 167). It should be noted that *C.I.G.* 2. 2076 (=Lat. i. 77), which Fleischer quotes as being found on Berezan, Latyshev says is of uncertain attribution.

of land in the middle. All three places were sacred to Achilles Pontarches. From so late an author as Dio, of course, nothing can be proved as to the antiquity of the cult, except that one of such importance was not very likely to be of recent introduction. That Achilles was from very early times worshipped as the tutelary deity of the North Euxine we know from the line of Alcaeus already quoted. We have no very early Oibian inscription referring to Achilles, but one very important one¹⁵⁰ is dated by Latyshev early in the first century B.C.; and is undoubtedly of the period before the city was destroyed, *i.e.* probably 150 years before Dio's visit. The inscription in question is a decree in honour of Nikeratos, son of Papias, who had protected the citizens from the enemy, and now was decreed a public funeral. In it the words occur:—*ἐν τῷ . . . ἀγῶνι τὰχιλλεῖ κατὰ τὸ πυθόχρηστον τῆς ἱπποδρομίας.*

Though this is the earliest Achilles-inscription from Olbia itself, we have a much earlier one from close at hand. At the mouth of the Borysthenes and Hypanis rivers was the Alsos Hecates, a sandy tongue of land at the end of the peninsula now called Kinburn. In the sea at some distance to the west of this point, some fishermen in 1885 dragged up in their nets a stone altar, with the inscription

Ἀχιλλεῖ
τὸμ βωμὸν
καὶ τὸ κέδρον.¹⁵¹

Latyshev dates this as fourth or certainly third century B.C. It is of great interest and importance, as indicating that the cult of Achilles on the North Euxine was even more widespread than had been thought.¹⁵² It would seem that there must have been a temple, or at least an altar, of Achilles, at the Alsos Hecates, where he was worshipped probably by fishermen, as the tongue of land does not appear to have been inhabited. However, as the altar was found at some distance out at sea, the sand-bank may have shifted its position.

We have an inscription of the same date or a little earlier (fourth century B.C.) from the island of Leuke,¹⁵³ a dedication by a citizen of Olbia to Achilles:—

[Ὁ δεῖνα Δη]μοστράτο(ν) Ἀχιλλεῖ
[Λευκ]ῆς μεδέοντι Ὀλβιοπολίτ[η]ς,

which may be taken as evidence of the existence of the cult in Olbia itself in comparatively early times.¹⁵⁴ Also there was found on the island of Leuke an important decree¹⁵⁵ of the people of Olbia in honour of some person, apparently an inhabitant of the island, dated by Latyshev at the end of the fourth or beginning of the third century B.C. A fragmentary proxenos-

¹⁵⁰ i. 17.

¹⁵¹ Lat. iv. 63.

¹⁵² Note also a fragmentary inscription from Neapolis of the second century B.C.; apparently a dedication to Achilles (Lat. iv. 191).

¹⁵³ Lat. i. 172.

¹⁵⁴ For the form of the dedication cp. the one at Neapolis by Posideos Ἀχιλλεῖ νῆσοι [μεδέοντι]. Lat. i. 244.

¹⁵⁵ Lat. i. 171.

inscription¹⁵⁶ of the same period, found at Olbia, he also thinks refers to some inhabitant of Leuke. But according to ancient authors the island was deserted, and sailors were forbidden to spend the night there,¹⁵⁷ from which it would seem that the persons honoured by these decrees were priests or curators of the temple of Achilles at Leuke. If the island mentioned by Dio was Leuke, it might be inferred that the temple there was in charge of the people of Olbia.

For the importance of the cult in the later period of the city we have abundant evidence in the series of dedicatory inscriptions given by Latyshev,¹⁵⁸ belonging probably to the second or third century after Christ. These inscriptions, though not found actually on the site of Olbia,¹⁵⁹ Latyshev thinks quite certainly belong to the city, both from the similarity of the formulas to those of undoubtedly Olbian inscriptions, and also because nearly all the names given in these inscriptions are found in others from Olbia. Some have thought this series belonged to the town of Odessos, but it was too small to have had five archons and six praetors, or to have had the games referred to in some of the inscriptions. One curious point of contrast between these inscriptions and those to Apollo Prostates, which belong to the same period, is that in the latter the gift is always mentioned, whereas in the former it is merely called *χαριστήριον*; except in 81, where it is a *στέφανος*, (given by a priest), and in 77, where even *χαριστήριον* is omitted. No. 79 may be quoted as an example of these inscriptions:—

Ἀγαθῇ τύχῃ Ἀχιλλεῖ Ποντάρχῃ
οἱ περὶ Καλλισθένην Σατύρου στρατηγοί,
Μηνόδωρος Ποντικοῦ,
Νάβαζος Νουμηνίου,
Ἀχιλλεὺς Συν(τ)ρόφου,
Βάδαγος Ἰεζδράδου,
Δάδαγος Κουζαίου,
ὕπερ τῆς πόλεως εὐσταθίας καὶ τῆς
ἐαυτῶν ὑγείας χαριστήριον.

No. 82 is worthy of note, because the dedication is to Ἀχιλλεῖ Ποντάρχῃ καὶ Θέτιδι. A cult of Achilles, Thetis, and the Nereids is known at Erythrae in Ionia.¹⁶⁰

It should be noticed that the name Achilles is of frequent occurrence at Olbia; twelve instances of it appear in the inscriptions given by Latyshev.

Whether we have any numismatic evidence for the cult of Achilles at Olbia is doubtful. De Koehne¹⁶¹ gives three coins which he thinks represent

¹⁵⁶ Lat. i. 13.

¹⁵⁷ Scyl. *Peripl.* 68; Arrian. *Per.* 32; Anon. *Peripl.* 66; Amm. Marc. xxii. 8, 35; Max. Tyr. *diss.* xx. 7; Philostr. *Heroic.* 20, 35.

¹⁵⁸ i. 77-83, iv. 17-19.

¹⁵⁹ For the dispersion of the stones of Olbia,

Latyshev quotes Uvarov, (*Rech.* p. 32). Lat. iv. 18, is said actually to have been found among the ruins of Olbia.

¹⁶⁰ Dittenberger, *Syll.* 2 600; Michel, *Recueil*, 839, B. 2, 27.

¹⁶¹ *loc. cit.* i. p. 84, 85, 88.

Achilles. Two of these we have already seen are with more probability assigned to Ares. The third coin may possibly represent Achilles. It appears to be similar to that given by Pick, Pl. xii. 2, but not the same coin. De Koehne describes the reverse type of this coin thus:—

ΟΛΒΙΟΠΟΛΕΙΤΩΝ. Homme nu, tourné à gauche, posant le pied droit sur une élévation et tenant dans la droite un objet indistinct. Devant lui une *meta*. Dans le champ Γ.

If the object really is a *meta*, the coin may reasonably be assigned to Achilles, and would be the solitary instance of his appearance upon the coins of Olbia.

Heracles.

The head of Heracles is a not infrequent type on Olbian coins. We should expect to find him a special object of worship at Olbia, in view of his connection with the North, familiar enough from Pindar (*Olymp.* iii.), with which may be compared the passage where Herodotus says that the Greeks dwelling about the Pontus relate that Heracles, after taking the cattle of Geryon, passed through Scythia, and then came ἐς τὴν Ὑλαίην καλεομένην γῆν,¹⁶² recalling at once Pindar's

τόθι δένδρεα θάμβαινε σταθείς.

Herodotus also relates¹⁶³ that in Exampacus, a district not far from Olbia, was shown a footprint of Heracles; however, throughout Greek lands Heracles seems to have had attributed to him objects similar to those which in England are usually assigned to the devil,—the Devil's Arrows, Devil's Punchbowl, etc.,—so the footprint here has most likely no particular significance. His cult was so widespread that we have probably no right to claim any special local importance for it at Olbia, but his legendary connection with the North, as in the case of Apollo, would make him seem a fitting object of worship there.

The epigraphic evidence for the cult of Heracles at Olbia is rather curious. Latyshev¹⁶⁴ gives an inscription which is carved on a stone very similar to the gravestones in use at Athens in the fourth century B.C., and apparently made of Attic marble. It has been thought, therefore, that the block may have been sent out to Olbia from Athens for sepulchral purposes and then, having for some reason or other not been thus used, may have been appropriated to this dedication. The inscription is most fragmentary and was evidently purposely defaced in antiquity; it is restored thus by Latyshev:—

[Κλεόμβροτος Παντακλέους
ἀνέθ]ηκε τ[ὸν πύρ-
ρον] Ἡ[ρ]α[κλ]ῆ
[καὶ] τῶι δῆμ[ω]ι.

¹⁶² iv. 8, 9.

¹⁶³ Herod. iv. 82.

¹⁶⁴ *loc. cit.* i. 99. It should be said also

that on the other side is an inscription of much later date, given i. 67.

Then follows an epigram of six lines, of which the first two may be quoted:—

Ἡράκ[λ]ε[ς], σοὶ [τ]όνδε Κλεόμβροτος εἶσ[α]τ[ο] π[ύ]ρ[γο]ν
καὶ δῆμῳ, ποταμ[οῦ τ]οῦδε [πα]ρ' ἡ[ί]ονα.

(We have instances of towers being built by private individuals in the Protogenes decree¹⁶⁵). The inscription¹⁶⁶ in which Heracles and Heracles are mentioned together has already been noticed. It is curious that in this also there are signs that it was wilfully destroyed, from which, Latyschev says, it might be conjectured that at some time or other the cult of Heracles was abolished at Olbia, and his name upon the monuments erased.

Inscriptions from some other places on the North Euxine contain the name of Heracles.¹⁶⁷ One from Panticapaeum,¹⁶⁸ of the year 216 A.D., begins:—Τὸν ἀφ' Ἡρακλέους καὶ Εὐμόλπου τοῦ Ποσειδῶνος καὶ ἀπὸ προγόνων βασιλέων βασιλέα Τιβέριον Ἰούλιον Ῥησκούποριν. . .

This legendary genealogy would seem to explain why the various emblems of Poseidon and Heracles are found on the coins of the Kings of the Bosphorus.¹⁶⁹

With regard to the numismatic evidence for the cult of Heracles at Olbia, eight coins bearing his head are given by De Koehne, seven are reproduced in Pick's plates, and there are three in the Berlin catalogue (none in the British Museum). Pick's examples fall into two sharply defined classes. Three coins¹⁷⁰ have youthful heads of Heracles, with the lion-skin; the types are different, but they are all of fairly good style, all beardless, and all looking to the right; the reverse of each is a club. The first two examples in Pick are silver, and resemble No. 32 in the Berlin catalogue; the third is copper, and is similar to Nos. 117, 118 in the Berlin catalogue. No. 117 is thus described:—

Obverse.

Youthful head of Heracles, with lionskin, r. Two faint round counter-marks.

Reverse.

ΟΛΒΙΟ above a club horizontally placed. Below ΕΙΗΒΑ. (Æ 5).

Von Sallet thinks that BA on the reverse of this coin perhaps stands for Βασιλεύς, either a priest's title, or a reference to the Scythian kings. The latter seems more likely, in view of the last-quoted inscription from Panticapaeum, as other Scythian kings besides those of the Bosphorus may have claimed descent from Heracles.

The other four coins given by Pick¹⁷¹ have heads of quite a different style from the preceding, and with differing reverse types. They are all

¹⁶⁵ Latyschev, i. 16.

¹⁶⁶ Lat. iv. 459.

¹⁶⁷ Lat. i. 245, from Nikita, probably 3rd century B.C.; Lat. ii. 24, from Panticapaeum of 4th century B.C.; and Lat. ii. 350, from Phanagoria of 2nd century B.C.

¹⁶⁸ Lat. ii. 41. There are two similar from Phanagoria, ii. 358, 361.

¹⁶⁹ Perhaps the dedication from Panticapaeum (Lat. iv. 200) to Διὶ Γεωδρῶντι should be compared with this.

¹⁷⁰ Pl. x. 18–20; cp. Berlin Catalogue, 32, 117, 118.

¹⁷¹ Pl. x.; 21–25; cp. De Koehne, *loc. cit.* p. 18. No. 54.

silver, and the heads on the obverse are of a coarse heavy type, all turned to the left, and more or less similar. The reverse type of Pick's example, No. 21, is a vertical club enclosed in a wreath formed by two ears of corn; No. 22 has a wreath; No. 24 a bow in case placed over a club, and No. 23 a vertical bow in case.¹⁷²

It is perhaps worth while to note, in discussing Heracles' connection with Olbia, that the name *Καλλίνικος*, which so often occurs in literature as an epithet of Herakles, appears twice in Olbian inscriptions,¹⁷³ both of early date.

The River-god Borysthenes.

We have more numismatic evidence of this cult than of any other represented on Olbian coins, except that of Apollo; judging from the number of specimens contained in all the collections, more coins must have been struck with the head of the Borysthenes upon them than with any other type. The Berlin collection has 26 out of a total of 126 (besides several acquired since the appearance of the catalogue); the British Museum 9 out of 23; the Fitzwilliam Museum at Cambridge 4 out of 7; and De Koehne, out of about 160 coins, has 26 (which he assigns to the river Hypanis). This predominance of the river-god at Olbia is readily explained by the consideration that in South Russia the rivers are by far the most imposing natural features of the country,¹⁷⁴ and as such would be almost certain to become objects of worship to the early settlers. We know from Herodotus¹⁷⁵ that the Scythians worshipped the Danube. Of the Borysthenes in particular Professor Percy Gardner¹⁷⁶ says:—'We find traces of a peculiar veneration paid by the Greek colonists of Olbia to the river Borysthenes, whose head appears on their coins. 'This head is clearly modified in type in imitation of the physiognomy of the Scythians who inhabited the steppes of the river, and to whose physiognomy it bears a striking resemblance.' These Scythian characteristics of the coin-types will be easily seen from the accompanying illustration (Fig. 10). Rivers have such a distinctively local character that it is particularly easy to personify them. They often appear on coins in the form of a bull. Can the striding bull, which is the obverse type of an Olbian coin, be taken as a personification of the river-god?¹⁷⁷ This hardly seems likely, in view of the other series of Borysthenes coins, but the coin is apparently quite late. There is another coin, of Imperial date, which has a bull as reverse type.¹⁷⁸ The series in the illustration belongs to another type,—a human figure, with human face and a shaggy beard, but

¹⁷² Of these coins De Koehne says, 'Les dernières pièces de ce type indiquent déjà une époque de décadence.'

¹⁷³ *Iat.* i. 12, 114.

¹⁷⁴ Cp. Herod. iv. 47; *et seq.* and esp. iv. 82, *Θαμάντια δὲ ἡ χώρα αὐτὴ οὐκ ἔχει, χωρὶς ὅτι ποταμούς τε πολλὰ μεγίστους καὶ ἀριθμὸν πλείστους.*

¹⁷⁵ Herod. iv. 59.

¹⁷⁶ *Transactions of Royal Soc. of Literature*, vol. xi. second series, p. 174, *et seq.*

¹⁷⁷ Pick, Pl. xi. 23, Berlin Catalogue, 132, De Koehne, *loc. cit.* p. 84, explains it as referring to the fact that the wealth of Olbia largely consisted in cattle.

¹⁷⁸ Pick, Pl. xii. 3.

with the forehead, horns, and ears of an ox.' ¹⁷⁹ At Olbia, however, no more than the head appears on the coins.

The coins ¹⁸⁰ themselves can be best discussed with reference to the accompanying Fig. 10; they are only differentiated in the Berlin and British Museum Catalogues by the monograms on the reverse, but the heads of the river-gods on the obverse are of very different types.

The first coin (a) illustrated ¹⁸¹ is not Scythian in type; the artist seems to have been anxious to get as close to the bull-form as possible; it is a bull's head slightly humanised. The forehead with its short horns and the beard are especially bovine. One would suppose that here the die-cutter was copying a type from another coin; at all events there is nothing local about it.

The second coin (c) ¹⁸² shows a head which is an approximation to the Scythian type, but the forehead and short horns are still those of a bull; the



FIG. 10.—BRONZE COINS OF OLBIA IN THE BERLIN MUSEUM.

bull's ears are less distinct than in No. 1. The hair is still of the conventional river-god type, and looks as if it were dripping.

The head on the obverse of the third coin (d) ¹⁸³ is rather curious; it is now wholly human, except for the short horns on the forehead which mark the river-god, and the human ears are very clear. But the type is more conventional and less Scythian than the two which follow. It seems surprising

¹⁷⁹ Professor Jebb, on *Βούρυγχος*, Sophocles, *Trach.* 13. The Achelous appears thus on an archaic coin of Metapontum in Lucania, Millingen, *Anc. Coins of Grk. Cities and Kings*, Pl. i. 21. The coin given by Head, *Hist. Num.* p. 63, is not the same.

¹⁸⁰ The casts from which these photographs were made were furnished by the kindness of Dr. Dressel.

¹⁸¹ Pick, Pl. ix. 26 (Imhoof-Blumer collection).

¹⁸² Pick, ix. 27 (obverse only; the reverse numbered 27, belongs to the third coin (d) in the present illustrations), Imhoof-Blumer collection. An example is in the British Museum, No. 10, cut on p. 12 (Catal. 'Thrace').

¹⁸³ Imhoof-Blumer collection.

that Pick should not have given this head among his examples, as it is quite distinctive.

The next coin (*e*)¹⁸⁴ is perhaps the most typically Scythian of the five; the coin is not struck evenly, so no room is left for the horns to show. No doubt they were on the die, but everything else about the head is as human, and as Scythian, as possible, of the type from which the well-known heads of Pan on the coins of Panticapaeum were developed. The Scythians on the vase of Xenophantos, already referred to, are of the same general type; compare too the wounded Scythians on a very interesting piece of gold work from South Russia.¹⁸⁵ The left-hand figure of the four has a profile very like the second head in the coins represented here.

The last (*f*) of the Borysthene coins¹⁸⁶ represented here also shows distinctly Scythian features, but the horns are plainly seen, and the hair is more like that of the conventional river-god.

All these coins have similar reverse types (*b*),—a battle-axe and bow in case,¹⁸⁷—so the Scythian river-god is associated with the Scythian weapons, and the obverse and reverse types are alike purely local.¹⁸⁸ This is the special interest possessed by this series of coins; like the representations of Scythians on the vases, it shows that there were artists at Olbia who portrayed the men they saw around them, instead of merely perpetuating conventional types. It has already been urged that the appearance of these Scythian heads among others that are wholly Greek seems to show a racial feeling on the part of the artist, which would indicate that Olbia remained a purely Greek city, at any rate during its earlier and more prosperous days. These coins are said in the British Museum catalogue to be earlier than the time of Alexander the Great; De Koehne thinks that they extend over a period of more than a century. When once a mixed population of Greeks and Scythians had arisen, naturally this type would not be perpetuated on the coins. But we should have expected that the Borysthene would have continued in some form or other as a coin-type, considering in how large a measure the prosperity of the city depended on the river. It must be remembered, too, that one of the city's names, and apparently the earliest, was Borysthene. Herodotus speaks of the city by this name in his narrative of Scyles, and also calls the townsmen Borysthenites, though he notices¹⁸⁹ that they preferred to call themselves Olbiopolitans. The actual name Olbia is not found in Herodotus.

¹⁸⁴ In the Berlin collection, but not in the catalogue; Pick's coin (Pl. ix. 28) is similar, but not the same.

¹⁸⁵ *Compte Rendu*, 1864, p. 142.

¹⁸⁶ Berlin Catalogue, No. 93, Pick's coin, Pl. ix. 29, is not unlike this, but the resemblance is not very close.

¹⁸⁷ The coin given by Pick (Pl. ix. 32) already noted as being ascribed by De Koehne to Poseidon should probably be assigned to this series, as the reverse type is the same. The

type of the head on the obverse is different from those given; it is very large, almost filling up the surface of the coin, and the horns cannot be seen on the forehead.

¹⁸⁸ An Olbian inscription found in 1900 (Lat. iv. 460), of the fourth century B.C., refers to archery contests held at Olbia. These must have been imitated from the Scythians, as Greeks in other places do not seem to have had them.

¹⁸⁹ Herod., iv. 18.

The purely Hellenic character of the religion of Olbia seems to be demonstrated by the facts above presented ; there is no trace of any merely local god except the Borysthene, who is of course only an apparent exception, as the neighbouring river is a figure that constantly appears on the coins of Greek states. Local colour is supplied by the Scythian bow and arrows, and perhaps by the sturgeon ; the other types can hardly be said to be in any way distinctive.

G. M. HIRST.

THE METHOD OF DECIDING THE PENTATHLON.

THE difficulty of this question is due to the scanty and unsatisfactory character of the literary evidence. Such evidence as we do possess consists of a few allusions in early classical authors, mostly poetical and metaphorical, and of the explanations of these passages given by scholiasts and lexicographers of uncertain date and authority. The question can only be solved by framing hypotheses which will explain as far as possible these scanty allusions. But in such a case it is not sufficient for a hypothesis to satisfy the literary evidence; it must also conform to common sense and probability. We may take it for granted—and the more one studies the subject, the more certain one feels—that the Greeks possessed a knowledge of athletics little, if at all, inferior to our own. Now there are two conditions which are essential to the success of an athletic meeting—Fairness and Order. The arrangements must ensure absolute fairness for all competitors, and they must ensure the comfort of spectators and competitors alike by avoiding useless waste of time, frequent shifting of the scene, unnecessary repetitions, or tedious complications. The sense of Fairness and of Order was characteristic of the Greek mind, and no theory of Greek athletics can be satisfactory which fails to satisfy these two conditions. Quite an extensive literature has already sprung up around the Pentathlon, especially in Germany. Unfortunately in too many cases the writers have set about to improvise a system of athletics out of their inner consciousness with no practical experience to guide them. Hence their whole theories are often ruined by some false and unnecessary assumption with which they have started. My object is to examine the various hypotheses which have been proposed, and the assumptions on which they rest, and to apply to them the double test of Fairness and Order, in the hope that by eliminating such elements in them as do not satisfy the conditions of the problem, we may arrive if not at the certainty of the truth, at least at an approximation to the truth. This truth will I believe be found to be marked by the Greek virtue of simplicity.

1.—*The Theory of a Fivefold Victory.*

The old hypothesis that victory in all five events was necessary may be briefly dismissed. Had this been the case, the crown for the Pentathlon would have been scarcely ever awarded, whereas in the list of Olympic victors

recently discovered in an Oxyrhynchus papyrus¹ the victor in the Pentathlon is recorded regularly. Moreover a scholiast to Aristides² expressly informs us that 'three out of the five events were sufficient for victory.' The idea seems to have arisen from the well known epigram of Simonides³ and from a misunderstanding of a passage in Herodotus, which is in reality a conclusive proof against it. Herodotus (ix. 33) says that Tisamenus *παρ' ἐν πάλαισμα ἔδραμε νικᾶν* 'Ολυμπιάδα, 'Ιερωνύμῳ τῷ Ἀνδρίῳ ἐλθὼν ἐς ἔριν.' Pausanias (vi. 14) confirms the victory of Hieronymus, and in another passage (iii. 11. 6) says of Tisamenus 'τὰ δύο γε ἦν πρῶτος. καὶ γὰρ δρόμῳ τε ἐκράτει καὶ πηδήματι Ἱερώνυμον, καταπαλαισθεὶς δὲ ὑπ' αὐτοῦ καὶ ἁμαρτῶν τῆς νίκης κ.τ.λ.'

Hermann⁴ interprets Herodotus as saying that Tisamenus won not two but all four events, and only missed the prize by being defeated in the wrestling. This interpretation, repeated by Dr. Marquardt,⁵ is obviously wrong. The words *παρ' ἐν πάλαισμα* are not the same as *μόνη πάλη*, and mean not 'wrestling alone' but a 'single contest or fall.' Again if Tisamenus won four events, why does Pausanias expressly say that he won two? Lastly applying the test of fairness, is it not ridiculous to suppose that a solitary victory in wrestling should have not only cancelled the four victories of Tisamenus, but actually given Hieronymus the prize?

The true interpretation of the passage is obvious: 'Tisamenus came within a single *πάλαισμα* of victory,' i.e. he won two events but lost the odd. Can we not go further and give *πάλαισμα* its accurate meaning of 'a fall in wrestling'? He came within a 'single fall' of winning. Each had won two events, each had scored two falls⁶ in the wrestling, and the whole contest depended on the last fall! Just as we talk of losing a golf match by a single putt, or winning a rubber by the odd trick. Such a graphic touch is surely just what one would expect from Herodotus.

2.—Dr. Pinder's Theory.⁷

The distinctive feature of this theory is that at each stage in the competition the number of competitors is reduced by one till only two are

¹ Oxyrhynchus Papyri, ii. 88.

² Schol. Aristides, *Pan.* Frommel p. 112.

³ Ἰσθμία καὶ Πυθοὶ Διοφῶν ὁ Φίλωνος ἐνίκη ἄλμα ποδωκέην δίσκον ἄκοντα πάλην.

⁴ Hermann *De Sogenis Aeginetae victoria*, p. 9.

⁵ Marquardt *Gymn. Programm. Güstrow*, 1886, pp. 18, 19. Since writing the above I find Hermann's view restated and defended by Dr. Haggemüller in 'Der Aufeinanderfolge der Kämpfe im Pentathlon' (München, 1892). To prove his point he actually proposes to emend the passage in Pausanias by omitting the γάρ in καὶ γάρ, and proceeds to translate it,

'he was first of all competitors in two events, i.e. throwing the diskos and the spear, and further beat Hieronymus in running and jumping.' A theory which requires such gratuitous emendation surely needs no further comment.

⁶ From the frequent allusions to 'three falls' in wrestling, I assume that there were if necessary five bouts, but there may sometimes have been only three bouts, in which case two falls would decide the victory.

⁷ Pinder, *Ueber den Fünfkampf der Hellenen*, Berl. 1867.

left in the wrestling, the winner of which wins the whole Pentathlon. This result is attained by placing the jump first, and making it a test by which means only the first five are left in. The only evidence for this hypothesis is a passage in Plutarch⁹ comparing the contest between Alpha and the other letters to a Pentathlon, a highly metaphorical passage which has been a frequent stumbling block to writers on this question. Surely nothing can be more unscientific or unliterary than to build up a theory on the details of a metaphor or simile. How often does the thing compared correspond in every detail to that with which it is compared?

I need not repeat the arguments by which Professor Percy Gardner⁹ has already disproved this theory in Vol. I. of this *Journal*: it is sufficient to observe that according to Dr. Pinder a competitor might win the first four events and yet be beaten in the final, while one who had been beaten in all the first four, might yet, by winning the wrestling, prove the victor.

3.—Theories of a Triple Victory.

The theories next to be discussed are based upon the assumption that a triple victory was *necessary* to secure the prize for the Pentathlon. How far this assumption is justified by the evidence, is a point which I will examine later. The chief theories founded upon it are those of Professor Percy Gardner, Dr. Marquardt, and Dr. Fedde.

3 A.—Professor Gardner's Theory.¹⁰

Cases must have occurred where no competitor won three events. Was no prize awarded in such a case, or can we explain the triple victory in another way? Professor Gardner solves the difficulty by supposing that the Pentathlon was treated as a single event, and the competition conducted on the same principle as a boxing or wrestling tournament, the competitors being arranged in pairs, each pair contending against each other in all five contests. The winner of each pair, and therefore of the final pair, must necessarily then have won three out of five events.

In case of an odd number of competitors there must have been a bye or *ἔφεδρος*. The *ἔφεδρος* was of course, as Prof. Gardner shows,¹¹ only a bye for a particular round: in the next round lots would be drawn again, and probably the bye would fall to some one else. To anyone who has the least acquaintance with athletics, this is so obvious as scarcely to need restating, were it not that Dr. Marquardt maintains the view that the *ἔφεδρος* once chosen remained an *ἔφεδρος* till the final round of the competition and he

⁹ Plut. *Quaest. Sympr.* ix. 2: διὸ τοῖς τρισὶν ὥσπερ οἱ πένταθλοι περίεστι καὶ νικᾷ, τὰ μὲν πολλὰ τῷ φωνᾶν εἶναι, τὰ δ' αὖ φωνάμεντα ἐν τῷ δίχρονον, ταῦτα δ' αὐτὰ τῷ πεφυκέναι καθηγεῖσθαι,

δευτερεύειν δὲ μηδέποτε μηδ' ἀκολουθεῖν.

¹⁰ *J.H.S.* i. pp. 217-218.

¹¹ *J.H.S.* i. pp. 210 seq.

¹² *op. cit.* 219.

draws a pathetic picture of the unhappy victor in the first heats of the race having his strength as he toils over the deep sand (?) and looking anxiously to the spot where the *ἔφεδρος* stands fresh and ready to take him on when already exhausted by two or more heats.¹²

There is at first sight a simplicity and fairness about Prof. Gardner's theory that has caused it to be generally accepted in England. But the objections to it are very serious. A passage in Xenophon (*Hell.* vii. 4. 29) seems to me decisive against it. Speaking of the attack on Olympia by the Eleans when the Arcadians were conducting the games, Xenophon says *καὶ τὴν μὲν ἵπποδρομίαν ἤδη ἐπεποιήκεσαν καὶ τὰ δρομικὰ τοῦ πεντάθλου· οἱ δ' εἰς πάλην ἀφικόμενοι οὐκ ἔτι ἐν τῷ δρόμῳ, ἀλλὰ μεταξὺ τοῦ δρόμου καὶ τοῦ βωμοῦ ἐπάλαιον.* German writers seem to be correct in interpreting *τὰ δρομικὰ* as all the four events which took place in the *δρόμος*,¹³ i.e. all the events except the wrestling. If this be so, there is no longer any ground for maintaining with Dr. Frazer¹⁴ that wrestling was the second event in the Pentathlon, an order which Prof. Gardner has shown to be absurd from a practical point of view, and which is now conclusively disproved by a passage of Bacchylides,¹⁵ who expressly describes wrestling as the last event. But whether *τὰ δρομικὰ* is used of all the first four events or of the running only, the natural meaning of the passage is that the whole of the event or events so described took place before any of the wrestling began. The same arrangement is implied in the words used by the Scholiast¹⁶ of Phayllus and his record jump; *τῶν πρὸ αὐτοῦ σκαπτόντων ν' πόδας καὶ τούτους πηδώντων ὁ Φάλλος ὑπὲρ τοὺς ν' πᾶν ἐπήδησεν.* Prof. Gardner admits that this is the natural meaning of these passages, but suggests that they may refer to a particular heat, or to the final heat. But the natural interpretation is supported by practical considerations which seem to me fatal to his theory. The excessive strain of such a

¹² Marquardt *op. cit.* pp. 20, 21. The idea that the Greeks raced in soft sand is I believe entirely unfounded. It is based on Lucian's statement about runners practising in sand. The ground at Olympia is very hard in summer, was it broken up carefully before the race?

¹³ This distinction must be connected rather with the training places than with the actual sports. Thus Cleisthenes provided for the suitors of Agarista *καὶ δρόμον καὶ παλαίστρην* (Hdt. vi. 126), and Pausanias mentions at Olympia besides the Gymnasium 'where they practise for the Pentathlon and the races,' a smaller enclosure 'where the athletes practise wrestling' (Pans. vi. 21). In the later form of the Stadium the semicircular theatre (*σφενδόνη*) would be the natural place for such events as boxing or wrestling. The simpler rectangular Stadium of Olympia however would be less convenient for such contests. Still it is no longer possible to argue from this passage in Xenophon

that the wrestling usually took place in the Altis. For Martin Faber has shown (*Philologus*, L. 495) that the following sentence—*οἱ γὰρ ἠλεῖοι σὺν τοῖς Ἰπλοῖς παρήσαν ἤδη εἰς τὸ τέμενος*—suggests that this arrangement was the exception rather than the rule (cf. Bury, *Hist. of Greece*, p. 621). The passage does not seem however decisive of what took place at Olympia.

¹⁴ Frazer *Pausanias* iii. 488.

¹⁵ Bacchylides ix. 30-36 with F. G. Kenyon's note:

*τοῖος Ἑλλάνων δι' ἀπείρονα κύκλον
φαῖνε θαυμαστὴν δέμας,
δίσκον τροχοειδέα ῥιπτῶν
καὶ μελαμφύλλου κλάδον
ἀκτέας ἐς αἰπεινὰν προπέμπων
αἰθέρ' ἐκ χειρὸς βοὰν ὤτρυνε λαῶν,
ἣ τελευταίας ἀμάρνυμα πάλας.*

¹⁶ Schol. Lucian *ad Somn. seu Gall.* 6.

competition has been well stated by Mr. Myers.¹⁷ No athlete after a severe bout of wrestling in the first round could have done himself justice in the lighter and more skilful exercises of the second round. The contest would have degenerated into a test of endurance, and the elements of skill, activity, and grace, which made it so popular, would have disappeared. Again the element of luck would have been greatly increased. A competitor who was drawn against a strong opponent and who like Hieronymus only won in the last round of the wrestling would be at an enormous disadvantage, compared to one who meeting a weak opponent had won three out of the first four events. Still more would this be the case with an ἔφεδρος. In any competition the bye has an advantage in the next round, but this advantage would be almost equivalent to certain victory in a competition where each round consisted of five events.

If it were certain that the wrestling took place elsewhere than the Stadium, we should have another strong argument against this theory in the delay and confusion which would be caused by the constant movement of athletes and spectators backwards and forwards between the race-course and the wrestling place. At all events from a spectacular point of view the competition would by being thus broken up lose all its interest and dramatic effect and become extremely tedious to the spectators. Such arguments might be multiplied, and agreeing as they do with the natural interpretation of our authorities, they seem to me decisive against Prof. Gardner's hypothesis, though of those based upon the *τριαγμός* it is perhaps the best.

3 B.—Dr. Marquardt's Theory.¹⁸

Another explanation of the *τριαγμός* is offered by Dr. Marquardt. By means of preliminary heats in the race, which he therefore places first, he reduces the number of competitors to five. These five competitors then compete against each other in each of the five events in pairs, lots being drawn afresh for each event. In each event we should have three rounds (*τριαγμός*), consisting of two pairs and a bye, one pair and a bye, and the final. Thus in the jump we should have

- 1st round: A v. B, C v. D. E ἔφεδρος
- 2nd round: A or B v. C or D. E ἔφεδρος
- 3rd round: the winner of the 2nd round, say A v. E.

The winner A or E receives 3 marks; if E wins, A is second and obtains 2 marks, C or D is third and receives one mark; if A wins, there is no second, for on this system the bye has beaten no one, but C or D is third and receives one mark. The marks for wrestling are double those of the other events, and the prize is decided by the total of marks obtained.

¹⁷ *J.H.S.* vol. ii. 217.

¹⁸ Marquardt, *op. cit.* pp. 16, seq.

This most ingenious theory smacks of the midnight oil but surely not of the oil of the Palaestra. In the first place why does Dr. Marquardt reduce the number of competitors to that most inconvenient number five? Because, he says, five was a favourite number at Olympia (a five-yearly festival, a five days' festival), and because in the mythical account given by Philostratus of the founding of the Pentathlon five heroes took part.¹⁹ Far stronger arguments might be adduced for the number three. But while it is natural to select a low odd number for the number of sets in a game, such as rackets, tennis or fives, or for the number of events or points in a competition decided by points, as in the University Sports, fencing or the Pentathlon itself, an odd number of competitors, involving as it does a bye, is the most inconvenient possible in a tournament, and a system which necessitates a bye is positively unfair. A bye always has an advantage in the next round, but is sometimes a necessary evil: but Dr. Marquardt gratuitously makes this evil a part of his system.

Again can one imagine the Greeks guilty of so clumsy an arrangement? In wrestling and boxing the tournament system is necessary; introduced into jumping, throwing the spear or the diskos, it would not only be tedious to spectators and competitors alike, but by prolonging the contest would give an undue preponderance to endurance as opposed to skill. If we *must* apply the *τριαγμός* to each event, let us say with Dr. Fedde²⁰ that each competitor had three throws, or three jumps!

Lastly why does Dr. Marquardt assign double marks to the wrestling? He has invented a difficulty for himself by misunderstanding Herodotus ix. 23. As I have shown,²¹ the obvious meaning of Herodotus is that Tisamenus won two, but lost the odd event, being beaten by Hieronymus in the wrestling. Dr. Marquardt however believes that Tisamenus won four events, and Hieronymus, the victor in the whole Pentathlon, only the wrestling. Therefore Tisamenus had scored $4 \times 3 = 12$, Hieronymus at the most four seconds $4 \times 2 = 8$. But if wrestling only counted three, his score would be still only 11. Therefore wrestling manifestly counted 6 and Hieronymus scores $8 + 6 = 14$, and wins. Q. E. D!

Unfortunately there is a slight oversight in these calculations. Tisamenus as second in wrestling was surely entitled to two, if not four marks, and would therefore still be equal, if not ahead of Hieronymus. Let me present Dr. Marquardt with an explanation: Tisamenus was obviously an *ἔφεδρος* and could therefore count nothing, and so Hieronymus was still victor. Q. E. D!

On an argument so sublime in its simplicity I need waste no more time, were it not that it involves the common misconception that wrestling was the most important event in the Pentathlon. There were three events peculiar to the Pentathlon. Philostratus describing the qualities necessary for the Pentathlete lays stress on the suppleness and elasticity which these

¹⁹ Phil. *Gymn.* 3.

Leipzig, 1889.

²⁰ Fedde, *Ueber den Fünfkampf d. Hell.*,

²¹ § 1.

three require.²² but says nothing about either wrestling or running. Is it reasonable to suppose that more importance was attached in the Pentathlon to either wrestling or running, which had special competitions of their own, than to the three events which occurred in the Pentathlon and nowhere else? Again the Pentathlete was admired for his general development, and combination of activity and strength,²³ and the most famous Pentathletes were certainly of the lighter type, such as Phayllus the jumper and the diskobolos, or Xenophon²⁴ the runner, whereas the wrestler even in the fifth century was notorious for bulk and weight. Moreover if special importance is to be attached to any one event, it is surely to the jump. For the Pentathlete was represented by sculptors carrying jumping weights.²⁵ The jump, as we learn from Pausanias, was especially accompanied by music.²⁶ The Pentathlete was proverbial for his powers of jumping;²⁷ and Pollux says of him expressly ἴδια αὐτῷ πηδᾶν, ἄλλεσθαι, πηδητικός, ἄλτικός, κ.τ.λ.²⁸ Such evidence, if it does not prove that the jump held the first place, is sufficient to prove the fallacy of assigning that position to wrestling. This misconception, which vitiates most of the German theories on the subject, appears to me to be contrary to the whole spirit of the Pentathlon.

Dr. Marquardt's theory may be therefore rejected as inconsistent with the evidence and as not satisfying the conditions of fairness and order which are essential at athletic meetings.

3 c.—Dr. Fedde's Theory.²⁹

A still more artificial theory is that of Dr. Fedde. He supposes the normal number of competitors to have been twenty-four. Why? Because, forsooth, Plutarch in the passage referred to above compares the contest of Alpha and the other letters to the Pentathlon, and there are twenty-four letters in the alphabet. Further the number three is the characteristic number of the Pentathlon and enters into every detail. Therefore these twenty-four athletes are divided into eight heats of three, who compete against each other. The athlete who has won all five events in his heat is the winner of the whole competition; if there are more than one such, the contest between them is decided by a new *πίλαισμα*. In his later work Dr. Fedde apparently modifies this theory by only allowing those who have won two at least out of the first four events in their heat to enter the final stage of wrestling, the victor in which is therefore the *τριακτὴρ* or winner of the whole Pentathlon.

It is hardly worth while to criticise in detail so artificial a theory.

²² Phil. *Gymn.* 31 cf. 11 γυμνάζεται τι τῶν τριῶν.

²³ Aristot. *Rhet.* 1. 5 διὸ οἱ πένταθλοι κάλλιστοι ὅτι πρὸς βίαν καὶ πρὸς τάχος ἅμα πεφύκασιν. cf. Plato *Anat.* 135 D. E.

²⁴ Pind. *Ol.* xiii.

²⁵ Pausanias v. 27. 8, vi. 3. 10.

²⁶ *ibid.* v. 7. 4.

²⁷ Libanius ὑπὲρ τῶν ὀρχήστρ. p. 373 t. iii. Reiske 'τὸ νικᾶν ἐν τῷ πηδᾶν τοὺς πεντάθλους.'

²⁸ Pollux iii. 30. 151. For the whole subject cf. Krause, *Gymn. und Agon. der Hell.*, pp. 482-484 and *J.H.S.* i. p. 215.

²⁹ Fedde, *Gymn. Programm.* Breslau, 1888, and *Ueber den Fünfkampf der Hell.*, Leipzig, 1889.

Martin Faber³⁰ has shown the fallacy of such arithmetical arguments, and the obvious unfairness of such a system. In its first form victory would depend entirely on the luck of the lot; the best athlete might be drawn against the second best, and so win only three victories, while an inferior athlete drawn against weak opponents might win five victories. In its second form a strong wrestler who, being drawn against two weak opponents, managed to win two of the first four events would be certain of the final victory. Were this the case we should expect to find the same name frequently among the winners of the Pentathlon and the wrestling; whereas the only instance of this which I can find among the Olympic victors is Eutelidas, who in OI. 38 won the *boys'* Pentathlon and wrestling.³¹ I need say no more of this theory, which is open to nearly all the objections urged against the two preceding theories.

4.—*Examination of the Evidence for the Triple Victory.*

The three theories which have been last discussed rest upon two assumptions: the first is that with several competitors competing against one another, it would be unusual for any individual to win three events; the second is that the literary evidence implies the necessity of a triple victory.

In considering the first point we must remember that the Pentathlete was not a specialist in any one form of exercise. Thus Plato in a passage, which I shall have to consider again, says that the Pentathlete is inferior to the runner and the wrestler in their own special events, but superior in them to all other athletes.³² The wrestler would be too heavy, the runner not sufficiently developed in the upper part of his body.³³ Therefore as a rule those who hoped for prizes in these events would train specially for them and not for the Pentathlon, the entries for which would be confined to the all-round athletes who combined strength and speed.³⁴ With such a class of

³⁰ Faber, *Zum Fünfkampf d. Hell.*, *Philologus* L. (1891). Faber gives good reasons for believing that the number of competitors would seldom exceed twelve. There is some evidence for a small number in wrestling and boxing competitions; cf. Lucian, *Hermot.* 40. Dr. Haggenmüller (*op. cit.*) also criticizes this theory at length, but his own theory is perhaps still more improbable. He supposes that the first four events were merely test events, in which a certain standard only was required. All who had passed these tests were left in for the wrestling which practically decided the prize. Apart from the undue importance which this theory assigns to wrestling, it is surely ridiculous to degrade into test exercises those events which were peculiar to the Pentathlon.

³¹ A very weak testimony, for Prof. Mahaffy has shown how very unreliable is the evidence

of the early Olympic Register, *J.H.S.* vol. ii. Krause, *op. cit.* p. 782, mentions a Boeotian Acastides, who is named in an inscription as winning both events at Athens.

³² Plato, *Amat.* p. 135, D, E.

³³ Xenophon, *Symposium*, ii. 17.

³⁴ Instances of Pentathletes winning other competitions are remarkably rare. Eutelidas and Acastides as I have mentioned won victories in wrestling, Phayllus and Xenophon in the Stadium race (Xenophon's double victory in one day was a record, *Pind. Ol.* xii. 31). Several Pentathletes won in the *διαυλος*, or in the armed race, Gorgos of Elis (*Paus.* vi. 15, 9), Eraton, *Ol.* 135, Kranaos *Ol.* 231 (Krause, *Olympia.* 280, 312). Such double victories would naturally be more frequent in the more local games. At Athens, Bion and Timocles won the Stadium, and Callias the armed race as well the Pentathlon, *C.I.A.* ii. 2, 966, 968.

competitors a slight physical superiority would make one or two men superior to all the rest not in one single event but in several, especially if, as I shall try to show, most of the events required much the same qualities and physique. For the exercises were not as varied as they seem. Most writers have assumed that running and jumping would be won by the same man. It is perfectly true that pace is a most important factor in a running long jump. But these same writers usually maintain—on somewhat scanty evidence possibly—that the Greek long jump was a standing jump. However, whether the Greeks took a run or not, it is certain that they used jumping weights; and with weights only a short run, or rather a run of a few steps, is possible, and their effective use requires strength in the arms and shoulders, which parts they are most useful in developing. In fact the swing of the weights is very similar to the swing of the diskos,³⁵ and a good long jump, as a good throw, must have required a harmonious, well timed effort of every part of the body, the upper part as well as the lower. The general development and complete control of the muscles necessary for these events would give an equal superiority in wrestling, especially with men of the same weight, for the heavy-weight wrestler would be excluded by the very conditions of the competition; to a less extent they would tell in the race, especially if the race came fourth, *i.e.* late in the competition, for the sprinter proper would not enter for the Pentathlon. Therefore I believe that the five events would commonly be divided between two or at the most three competitors.³⁶ The scanty evidence which we have of the details of actual competitions agrees with this view. Phayllus must have won the jump, the diskos, and the race, for he also won the stadium race at Delphi. Hieronymus³⁷ won the diskos, spear, and wrestling. Automedes of Phlius³⁸ apparently won the same three events. Diophon, the subject of Simonides' epigram, possibly won all five. The only evidence against this view is the mythical Pentathlon of Peleus. But this contest was mythical, five heroes took part in it, and proper respect to the heroes demanded that the honours should be divided, each winning one event. Further, I am only stating what I believe would generally happen, not what would always happen.³⁹

I have endeavoured to show that a triple victory was probable. The next question is whether the literary evidence proves it to be necessary. This evidence consists in certain references to a triple victory and in the use

³⁵ Cf. the attitudes of discoboloi and jumpers in vase-paintings; cf. Jüthner, *Antike Turngeräthe*, p. 14.

³⁶ So Faber, *op. cit.* 'So konnte es meines Erachtens sehr wohl öfters vorkommen dass einer in drei Uebungen der erste war.' I had worked out my views on this question before reading Dr. Faber's article, and though I am not indebted to him for my arguments, I have carefully noted those points where our arguments coincide, because on practical questions two independent witnesses are better than one.

³⁷ Hdt., ix. 33.

³⁸ Bacchylides, ix. *l.c.*

³⁹ It is difficult to find a modern analogy. In a championship meeting all the competitors have specialised for one event. Perhaps the nearest analogy is offered by the sports of a large Public school. Schoolboys do not specialise in athletics and the chief events are usually divided between two or three boys. But of course such a competition is too limited for a true comparison.

of a number of cognate words *τριάζειν*, *τριάγμός*, *τριάκτηρ*, *ἀτρίακτος*, *ἀποτριάζειν*, *τρισεύειν*. It will be convenient to classify the passages referred to according to date as follows:

1. Passages from early classical writers—

(a) Aesch. *Choeph.* 338:

οὐκ ἀτρίακτος ἄτα;

(b) Aesch. *Agam.* 171:

τριάκτηρος οἴχεται τυχών.

(c) Aesch. *Eumen.* 589:

ἐν μὲν τόδ' ἤδη τῶν τριῶν παλαισμάτων.

(d) Eur. *Or.* 434:

διὰ τριῶν ἀπόλλυμαι.

(e) Plato, *Phaeiv.* 256 B:

τῶν τριῶν παλαισμάτων τῶν ὡς ἀληθῶς Ὀλυμπιακῶν ἐν νενικήσασιν.

(f) Plato, *Euthydem.* 277 C:

ἔτι δὲ καὶ τὸ τρίτον καταβαλὼν ὥσπερ πάλαισμα.

(g) Epigram on Milo *Anthol. Pal.* xi. 316:

οὐχὶ τρί' ἐστίν· ἐν κεῖμαι, λοιπόν τ' ἄλλα μέ τις βαλέτω.

(h) Epigram on Cleitomachus, *Anthol. Pal.* ix. 588:

τὸ τρίτον οὐκ ἐκόνισσεν ἐπωμίδας, ἀλλὰ παλαίσας
ἀπτῶς τοὺς τρισσοὺς Ἰσθμοθεν εἶλε πόνους.

With regard to these we may observe that *c*, *e*, *f*, *g*, obviously refer to three falls in wrestling; *a*, *b*, *d*, might quite well refer to the same, the epigram on Cleitomachus refers to a triple victory in Wrestling, Boxing, and Pankration, and perhaps also to three falls. Further the word *τριάκτηρ* had by the time of Aeschylus become proverbial for a victor.

2. Passages from late writers, scholiasts, and lexicographers—

(a) Schol. to Aesch. *Agam.* 171:

τριάκτηρος· νικητοῦ ἐκ μεταφορᾶς τῶν ἐν τοῖς πεντάθλοις ἀποτριάζόντων ἐπ' ἐλπίδι νίκης.

(b) Schol. to Aristides, *Pan.* Frommel p. 112:

οὐχ ὅτι πάντως οἱ πένταθλοι πάντα νικῶσιν· ἀρκεῖ γὰρ αὐτοῖς γ' τῶν ἐπρὸς νίκην.

(c) Plut. *Symp.* ix. 2:

διὸ τοῖς τρισὶν ὥσπερ οἱ πένταθλοι περίεστι καὶ νικᾷ.

(d) Suidas:

τρίαχθῆναι λέγουσιν οἱ παλαιστρικοὶ ἀντὶ τοῦ τρὶς πεσεῖν, ἢ τροχάσαντα νικηθῆναι στάδιον, δίαυλον, δόλιχον.

(e) Pollux, iii. 151:

ἐπὶ δὲ πεντάθλου τὸ νικῆσαι ἀποτριάξαι λέγουσιν.

Let me say to begin with that such passages, though undoubtedly based

upon facts, are a very insecure basis on which to build a theory. The statements of the student pure and simple on athletics are liable to be as inaccurate⁴⁰ as those of the lady novelist in the days before ladies became athletic. Only recently in a work of great learning there appeared, *à propos* of the starting lines at Olympia, the astounding statement that they were doubtless intended to give a good grip for the feet of the runners who planted a *heel* on each line! If such a statement can issue from one of our great Universities in this age of athleticism, one may be pardoned for viewing with scepticism the remarks of an unknown scholiast, especially when it is universally acknowledged that some of the scholiasts have made mistakes as to the five events which constituted the Pentathlon.⁴¹ Let me briefly consider these five passages. I have already pointed out the fallacy of arguing from so metaphorical a passage as that in Plutarch's Symposium. It merely confirms the statement of the scholiast to Aristides that three victories were sufficient. But this scholiast and the scholiast to the *Agamemnon* are contradictory. For if three victories were sufficient, how could the pentathlete be said to win a triple victory (*ἀποτριάζειν*) 'in hope of victory'? I can only suggest that the last words are a mistake on the part of the scholiast, who knew that *ἀποτριάζειν* was used of a victory in the Pentathlon but, under the false impression that five victories were necessary, added these words to correct his former statement.⁴²

Again, it does not follow because three victories were sufficient that three were necessary. For instance, a writer on the University Sports might naturally say that it was sufficient to win five out of the nine events.⁴³ But in 1897 Oxford won by four to three, there being two dead heats.⁴⁴ One can imagine what arguments might arise among archaeologists of some future millennium over such a record. Similarly in the Pentathlon if A won two events, B, C, D, one each, A would surely be the winner, but it would not cease to be true that victory in three events was sufficient.

With regard to the passage in Suidas it has been stated that Suidas is guilty of a mistake in applying the words to a triple victory in the race. Why should this be so? The word *τριάζειν* simply means to treble, and applied to sports can be used of any triple victory, of three falls in wrestling, of victory in three races, of victory in three Olympiads, of a triple victory in Boxing, Wrestling, and Pankration.⁴⁵ Such triple victors were especially

⁴⁰ cf. Faber, *op. cit.* p. 490.

⁴¹ cf. Marquardt, *op. cit.* p. 5. Faber, *op. cit.* p. 469.

⁴² This is surely simpler than Faber's explanation 'Infolge einer Vergleichung mit denjenigen unter den Fünfkämpfern, welche in der Hoffnung auf der Sieg nur in drei Stücken zu siegen suchen (d. h. sich nur in diesen üben).' One would expect the metaphor to be derived from those who were manifestly victors, not from those who hoped to be.

⁴³ I refer to the time before the tenth event

was added.

⁴⁴ Were dead heats unknown in the Pentathlon? It would be strange if they were. Homer's account of the chariot race certainly suggests the possibility and so does Virgil in the foot-race:

Transeat elapsus prior, ambiguumve relinquit.
cf. Herodotus v. 22. ἀγωνιζόμενος στάδιον συνεξέπικτε τῷ πρώτῳ.

⁴⁵ cf. Philostr. *Gymn.* 33 Leonidas in four Olympiads ἐν τετραὶς τριττὴν ταύτην. Cf. Faber, *op. cit.* p. 490.

honoured by the privilege of having their own portraits instead of merely typical statues set up at Olympia. Naturally then the word *τριακτήρ* would become equivalent to a decisive victor.

Finally Pollux simply tells us that *ἀποτριάξαι* was the term used of victory in the Pentathlon. As I have shewn, the term had become proverbial for victory as early as the time of Aeschylus, the original metaphor being probably taken from wrestling; for the separate events were older than the Pentathlon, and wrestling was always a favourite exercise of the Greeks. The word was, moreover, used of any triple victory and so was naturally applied to the Pentathlon, where three victories made victory in the whole secure. Sometimes there may have been only two competitors; in the Palaestra and Gymnasium private matches, we may be sure, were frequent, and in such a match the winner *must* have won three events. I have tried to show that in any case he would *probably* do so. If this is true, the term *ἀποτριάξιν* might well be extended inaccurately to the rarer cases where the winner won less than three events.⁴⁶ Possibly there was another reason which made the term particularly appropriate to the Pentathlon. It is probable that the three events peculiar to the Pentathlon were known as 'the triad,'⁴⁷ and some have suggested that only victors in one of these three were allowed to proceed to the final wrestling. At all events in the shorthand which the vase painters use to represent the Pentathlon, these three contests are almost universally employed to represent the whole.⁴⁸

I conclude therefore that there is nothing in the literary evidence to prove that three victories were *necessary*, and with this assumption disappears the necessity for the elaborate schemes which I have examined. Three victories were sufficient to make final victory certain, the most famous pentathletes undoubtedly won three victories, but this did not exclude the possibility of winning with two, or even one first.

5.—Dr. Holwerda's Theory.⁴⁹

The chief difference between Dr. Holwerda's view, and the one which I am going to propose, is his contention that only those who were successful in one or more of the first four contests were allowed to proceed to the wrestling. Were such a view tenable, it would be better to make the first three competitions qualifying, and so make the theory harmonise with the *τριαγμός* of events peculiar to the Pentathlon. But there are serious objections. In the first place, Dr. Holwerda attaches too much importance to wrestling, in case

⁴⁶ cf. Faber, *op. cit.* p. 491.

⁴⁷ This I take to be the meaning of Philostratus, *Gymn.* 11. The Pentathletè in training, he says, *γυμνάζεται τι τῶν τριῶν*. Faber, wrongly in my opinion, explains these words as the three events in which each Pentathletè specialised in the hope of victory, an idea which seems to me contrary to the spirit of

the Pentathlon.

⁴⁸ cf. P. Gardner, *J.H.S.* i. p. 215. In the British Museum vases B 134, 576, E 58 (repeated on each side of cylix) E 96, 164 (halteres on the ground). cf. Gerhard A. V. 39, 259, 294. *Annal. Inst.* 1846 M.

⁴⁹ Holwerda, *Arch. Zeit.* 1881, pp. 206, seq.

of a tie practically making it count double. In the second place, the victory of Peleus in Philostratus⁵⁰ would have been impossible, for Peleus having been only second in the first four events would never have reached the stage of wrestling. Therefore we must either place the wrestling earlier, which is absurd in practice and contrary to the evidence, or we must disregard the statement of Philostratus, who as a professed writer on gymnastics surely carries weight as an authority.

It will be convenient here briefly to consider this passage. 'Before the time of Jason,' says Philostratus, 'there were separate crowns for the jump, the diskos, and the spear. At the time of the Argo's voyage Telamon was best at throwing the diskos, Lynceus the spear, the sons of Boreas were best at running and jumping, and Peleus 'ταῦτα μὲν ἦν δεύτερος, ἐκράτει δὲ ἀπάντων πάλῃ. ὁπότε οὖν ἡγωνίζοντο ἐν Λήμνῳ, φασὶν Ἰάσωνα Πηλεῖ χαριζόμενον συνάψαι τὰ πέντε καὶ Πηλέα τὴν νίκην οὕτω συλλέξασθαι.'

Dr. Holwerda maintains that δεύτερος means not 'second best' but 'defeated.' But that δεύτερος can mean second in a competition, is clear from the words which Thucydides puts into the mouth of Alcibiades⁵¹: 'ἄρματα μὲν ἐπὶ τὰ καθήκα, ἐνίκησα δὲ, καὶ δεύτερος καὶ τέταρτος ἐγενόμην.' And if δεύτερος does not mean second best, why does Philostratus use the particles οὖν and οὕτω? Why does it follow that when the five events were put together, Peleus was victor in the whole? Only two explanations are possible: either wrestling counted more than other events, a view which I have tried to prove is contrary to the whole spirit of the Pentathlon, or in case of a tie at all events marks must have been assigned for second place. This then is the obvious principle to be deduced from this passage.

6.—Martin Faber's Theory.

Another theory is put forward by Martin Faber in Vol. L. of the *Philologus* (1891).⁵² In this article Dr. Faber shows a practical knowledge of athletics and athletic meetings far in advance of previous German writers on the subject. His conclusions and many of his arguments are very similar to those which I had myself arrived at independently before I read his article, but unfortunately he spoils his argument by endeavouring to establish an artificial distinction between two classes of Pentathlete. The most common and also the most glorious form of victory, says Dr. Faber, was that of the *τριακτῆρ*, who was first in three events. But the term was also extended, and applied by courtesy to those who won in other ways, such as Peleus, who was first in wrestling and second in all the other events, or even to the *ὑπακρος*, who owed his victory to being second in all five events. The existence of this *ὑπακρος* is the key to Dr. Faber's argument. But his existence as an independent being is I fear very shadowy: it depends upon

⁵⁰ Phil. *Gymn.* 3.

⁵¹ Thuc. vi. 16. 2.

⁵² pp. 469 *seq.*

three passages, firstly, a passage from a Heidelberg manuscript of uncertain date, secondly, a passage from Longinus, and thirdly, a passage from the Pseudo-Platonic dialogue, *Amatores*, to which I have already referred. In discussing this evidence I prefer to reverse Dr. Faber's order and to deal with the last passage first, as being the oldest and most important of the three. Socrates⁵³ is criticising the idea of the philosopher who is ἔμπειρος πασῶν τῶν τεχνῶν, and who without possessing the technical skill or knowledge of the craftsman has sufficient general knowledge of all crafts to enable him to form an intelligent judgment on any technical point which may arise. And he compares such an one to the Pentathlete who is inferior to the wrestler and runner κατὰ τὰ τούτων ἄθλα, but yet in these same exercises excels all other athletes. Just so the effect of philosophy on those who study it—τῶν μὲν πρώτων εἰς ξύνεσιν περὶ τὰς τέχνας ἐλλείπεσθαι, τὰ δευτερεῖα δ' ἔχοντας τῶν ἄλλων περιεῖναι καὶ οὕτως γίγνεσθαι περὶ πάντα ὑπακρόν τινα ἄνδρα τὸν πεφιλοσοφηκότα. From the addition of τινα τοῦ ὑπακρόν and from the fact that ὑπακρος is in another passage used by itself as a substantive, or coupled with πένταθλος, Dr. Faber concludes that the word is a term for a sort of Pentathlete, and he further adds that it is a term for a sort of victor in the Pentathlon, because in the following paragraph the philosopher is described as not such an one ὥστε διὰ τὴν τοῦ ἐνὸς τοῦτου ἐπιμέλειαν τῶν ἄλλων ἀπάντων ἀπολελείφθαι ὥσπερ οἱ δημιουργοὶ ἀλλὰ παντῶν μετρίως ἐφήφθαι. ἀπολελείφθαι, says Dr. Faber, is the technical word for being left behind in a race: therefore ὑπακρος denotes a particular sort of victor, one who gained the prize because he was second in all events, περὶ πάντα ὑπακρόν. It would be hard to find a better instance of the danger of arguing from a metaphor. Reference to a lexicon would convince any one who did not know it before that ἀπολελείφθαι τῶν ἄλλων ἀπαντῶν is used in its ordinary sense 'to be found wanting in everything else.' If ἀπολελείφθαι is used in a technical sense, why not ἐφήφθαι? But apart from such minor points this view of the meaning of ὑπακρος is contrary to the whole argument of the dialogue. There is no comparison between one philosopher and another, but between the philosopher as a class and the craftsman as a class. Likewise there is no comparison between one Pentathlete and another, but between the Pentathlete as a class and the specialised athlete. And the word ὑπακρος in either case connotes that quality which distinguishes the philosopher and the Pentathlete from the craftsman or professional. It connotes the general excellence of the all round man who though not absolutely first-rate in any particular department, is nearly first-rate in all.⁵⁴ Such a man is the object of admiration to the many, but of contempt to the specialist, and so the word ὑπακρος fluctuates between the idea of praise and blame. In the *Amatores* the idea of blame is perhaps predominant, in the passage from Longinus, which I next proceed to discuss, the idea of praise

⁵³ Plato, *Amat.* 135 C—136 C, 138 E.

⁵⁴ καὶ ὥσπερ ὁ πένταθλος πάσας ἔχει τὰς δυνάμεις τῶν ἀθλημάτων ἐν ἐκαστῇ ἡττων ἐστὶ τοῦ ἐν

τε ἐπιτηθέοντος, *Aristides Life of Pythagoras*, Bekker 440.

prevails. Longinus,⁶⁵ in comparing Demosthenes and Hyperides, says: 'εἰ δ' ἀριθμῶ, μὴ τῷ μεγέθει κρίνοιτο τὰ κατορθώματα, οὕτως ἂν καὶ Ὑπερίδης τῷ παντὶ προέχοι Δημοσθένους. ἔστι γὰρ αὐτοῦ πολυφωνότερος καὶ πλείους ἀρετὰς ἔχων καὶ σχεδὸν ὕπακρος ἐν πᾶσιν, ὡς ὁ πένταθλος, ὥστε τῶν μὲν πρωτείων [ἐν ᾗ πασι] τῶν ἄλλων ἡγωνιστῶν λείπεσθαι, πρωτεύειν δὲ τῶν ἰδιωτῶν.' In this passage, which is an obvious reminiscence of Plato, there is again no trace of any distinction between the ὕπακρος and other Pentathletes. On the contrary the somewhat unusual expression ὕπακρος qualified by the apologetic *σχεδόν*, as in Plato by *τις*, is explained by the words 'like the Pentathlete'; and the concluding words show that the Pentathlete as being ὕπακρος is contrasted on the one hand with other professional athletes, on the other hand with private persons. I conclude, therefore, that there is no evidence in either of these passages to prove that the term ὕπακρος denoted a *special sort of Pentathlete*, or a *special sort of victor* in the Pentathlon, but that rather it connoted the essential quality of the Pentathlete as a class, a quality so essential that it could be used as a synonym for πένταθλος.

The origin of Dr. Faber's distinction is to be found in his third passage. In a Heidelberg manuscript (Cod. Palat. Gr. 129, Fol. 37, v. 15-18) is found the following remarkable passage:

πέντε παρ' Ἑλλήσιν ἄθλοι· πυγμὴ πάλῃ δρόμος ἀκόντιον καὶ δίσκος. . . ὃ γε μὲν νικήσας κατὰ τοὺς πέντε ἠνωτέρῳ ῥηθέντας ἄθλους πένταθλος ἐκαλεῖτο· ὁ δὲ μὴ τοὺς ἐν ἐκάστῳ περιβοήτους δυνηθεὶς νικῆσαι ἀλλὰ τοὺς δευτερεύοντας ὠνομάζετο πένταθλος μὲν, ὕπακρος δέ.

Dr. Faber gives no information as to the probable date of this extract, and seems himself not altogether free from suspicions as to its value as evidence, suspicions which are surely well founded. In the first place, the writer commits the serious mistake of omitting the jump, which was by general consent the most characteristic feature of the πένταθλον, and substituting boxing. The next sentence surely implies the old belief, based perhaps on the couplet of Simonides, that five victories were necessary. The last sentence seems to me a hopelessly confused reminiscence of the Platonic τῶν μὲν πρώτων ἐλλείπεσθαι τὰ δευτερεῖα δ' ἔχοντας τῶν ἄλλων περιεῖναι, καὶ οὕτως γίγνεσθαι περὶ πάντα ὕπακρον, etc.'

If the theory could be proved from Plato and Longinus, this passage might afford some slight confirmation: but it surely is too slight a basis on which to build a theory which is unnecessary for the explanation of the other passages, if not actually unsuitable to them. Finally, from a practical point of view, the ὕπακρος ἐν πᾶσιν would be a far rarer phenomenon than the pentathlete who won all five events. The ὕπακρος could only win, if no one else won three events: therefore for him to win, the victories in the separate events must have been divided among at least three competitors, and it is almost incredible that not one of the three should have secured

⁶⁵ Longinus, Jahn, p. 55, Toupius ch. 34. p. 310 rightly explains the passage. The latter reads *ὃς γε λείπεται* and in his note

second place in some event, and that a fourth competitor should have obtained all five seconds.

7.—Conclusion

I have tried to show the serious objections to all the artificial schemes which have been suggested for the Pentathlon. I have tried to show that there is no evidence for the assumption that five or even three victories were necessary, nor for the assumption that one or more exercises were used as qualifying tests, least of all for the assumption that wrestling was the most important of the five events. Putting aside all these artificial ideas, we are left with two principles on which to go and I believe they are sufficient to explain all cases that could occur. The first is *that victory in three events in any case secured victory in the whole*; the second is *that in case of a tie account was taken of second or third places*. The first principle depends on the evidence for the *τριαγμός*, the second on the Pentathlon of Peleus. Let us see how these principles will work out.

With the order of events I am not immediately concerned. The only certain fact is that wrestling must have been last. Otherwise I doubt whether it is of any use to try to settle the order. The evidence at present is quite inadequate, and it is not even certain that the order was fixed. In the thousand years or more of the Olympic games, many changes must have occurred,⁵⁶ and we know from Pausanias that competitions were from time to time introduced or omitted, and that the Hellenodikæ could at their discretion alter the order of other events. There were many athletic meetings in Greece, and it would be as absurd to expect absolute uniformity in the details of Greek as of our own athletics.

The competitions in Jumping, throwing the Diskos and the Spear,⁵⁷ would naturally be conducted as in the present day, all competing against all. The race might be run in heats or not, as the numbers required; but I may point out that the starting arrangements at Olympia could accommodate twenty for a stadium race; it is highly improbable that there were ever so many entries, and the evidence for heats is at present very defective, indeed for the Pentathlon it is non-existent. Wrestling must of course have been decided on the tournament principle.

If there were only two competitors, one of them must have won three events. Suppose there were more, at least five A, B, C, D, E: for there cannot have been more than five winners in five events, and therefore what holds good of five will hold of any smaller or larger number. There are only four possible cases, which I state in what I believe to be the order of probability, applying to them the two principles I have laid down.

1. A 3, B 2 }
or B 1, C 1 }

A wins by the first principle.

⁵⁶ cf. Hauser, *Jahrbuch Arch. Inst.*, 1895, 193, n. 15.

⁵⁷ Whether the spear was thrown at a mark

or for distance, is very doubtful. Faber brings forward very strong arguments in favour of a distance throw. cf. Jüthner, *op. cit.* pp. 54, seq.

2. A 2, B 2, C 1.

The victory would depend on the result of the fifth event which C won. If the fifth event were the wrestling, it would be reasonable to suppose that A and B having won two events each, other competitors would drop out, and these two would be left to fight it out. If C had won an earlier event, the performances of A and B in that event, or perhaps in all the events in which they were not first, would decide the issue in accordance with our second principle.

3. A 2, B 1, C 1, D 1.

A would naturally win by the first principle: but it might be argued that such a case was decided by marks, *i.e.* by the second principle.

4. A 1, B 1, C 1, D 1, E 1.

In this highly improbable case, the victory must have been decided by marks as in the Pentathlon of Peleus.

In this scheme the only doubtful case is the third, and there is as far as I know no evidence upon which to decide it definitely. Other complications may have been introduced by dead heats; all such cases, would no doubt have been settled in accordance with the same common sense principles. The above scheme is in entire agreement with modern athletic experience and, with the doubtful exception of the words *ἐπ' ἐλπίδι νίκης* in the scholiast to the *Agamemnon*, there is I believe no passage in any ancient author that contradicts it.

E. NORMAN GARDINER.

MR. HEADLAM'S THEORY OF GREEK LYRIC MTREE.

FROM A MUSICIAN'S POINT OF VIEW.

GREEK music is the one branch of Greek art which makes no emotional appeal to us at the present day. The specimens which have come down to us are few in number, and with one exception belong to the post-classical period; yet these should be sufficient in quantity for us to form a judgment upon them. There are technical treatises, and the literature of the subject is by no means small. But the fact remains, that though musicians may have some idea of the position of Greek music in the historical development of musical technique, they are utterly unable to assign any aesthetic value to it. Mediaeval music, if it does not stir us profoundly, is to us at least as intelligible as the painting and sculpture of the same period. But to compare the sculptures of the Parthenon with what we know of Greek music seems ridiculous.

The celebrated Delphic Hymn which was the subject of so much excitement a few years ago, and which certainly did not suffer from lack of performance or discussion, has lapsed into obscurity, except for those who are specialists in the subject. It was simply an archaeological curiosity, and made no genuine appeal to modern emotions. The one fragment of Euripides quoted and described by Dr. Monro (*The Modes of Ancient Greek Music*, Oxford, 1894) is even more unintelligible.¹ And yet we know that to the Greeks music was as important as it is to us—more so indeed, since they attached to it an ethical significance which few people would think of attaching to the art now.

Mr. Headlam's theory, however, if it does not make these fragments more musical to our ears, at least shows that the Greeks had a feeling for certain aspects of music quite as subtle as that of nineteenth-century musicians. Yet before discussing this in detail, it will be well to consider a little more carefully what the Greek attitude was to music in general. To us, music is a thing by itself: the highest forms of music, we are apt to

¹ I have said nothing of the revived Greek music which accompanies the performances at Bradfield, never having had the advantage of hearing it. It is difficult to judge from the reports of other people: but I gather that

those to whom it appeals most strongly feel it only as a decorative background, not, as in a modern opera, the most poignant emotional force.

say, require no words to explain them. We divide the art into two branches, vocal and instrumental; and it is hardly an exaggeration to say that a large number of musicians regard the latter as the more important of the two. But with the Greeks the case was very different. 'Greek music,' says Dr. Monro, 'was primarily and chiefly vocal. Instrumental music was looked upon as essentially subordinate—an accompaniment, or at best an imitation, of singing. For in the view of the Greeks the words were an integral part of the whole composition . . . The modern practice of basing a musical composition—a long and elaborate chorus, for example—upon a few words, which are repeated again and again as the music is developed, would have been impossible in Greece. It becomes natural when the words are not an integral part of the work, but only serve to announce the idea on which it is based, and which the music brings out under successive aspects. The same may be said of the use of a melody with many different sets of words—Greek writers regard even the repetition of the melody in a strophe and antistrophe as a concession to the comparative weakness of the chorus.' And again: 'Several indications combine to make it probable that singing and speaking were not so widely separated from each other in Greek as in the modern languages with which we are most familiar . . . Our habit of using Latin translations of the terms of Greek grammar has tended to obscure the fact that they belong in almost every case to the ordinary vocabulary of music . . . Consequently every Greek word (enclitics being reckoned as parts of a word) is a sort of musical phrase, and every sentence is a more or less definite melody.' Thus the Greek orator and actor, according to Dr. Monro, who were definitely speakers, and not singers, according to Greek notions, habitually declaimed their speeches in what we should call recitative, and indeed recitative hardly less elaborate than that of J. S. Bach's oratorios. What, then, was the difference between the ordinary dialogue of a classical tragedy and the choral portions which were definitely set to music? The melodic system was no doubt more elaborate, but that does not count for very much, and we know that the Greeks had no harmony as we understand the term. The principal difference must have been the presence in the choruses of musical form. And however little listeners may be consciously aware of it, form, in the widest sense of the term, is perhaps the most important factor in all music worthy of the name. Form in music corresponds to composition in painting, to symmetry or balance in architecture. It is the one thing that makes music logical and intelligible. We find it in the music of the savage, who repeats one phrase until he is tired of it, then does the same with another, and finally goes back to the first, combining the pleasures of contrast and recognition. It has been the guiding spirit of civilized music from the times of the early Christian hymns: the vague meanderings of the early seventeenth century reactionaries were only saved from utter confusion by its presence; it tyrannized over the eighteenth century, and in the nineteenth reached its highest stage of subtle elaboration.

But musical form is a thing which we do not usually expect to find in modern poetry. Modern poets are as often as not quite unmusical, and

those who have had some technical knowledge of music do not seem to have applied its principles to any remarkable extent in their poetry. The greatest difficulty of modern composers has been to reconcile the different structural principles of poetry and music. The eighteenth century generally cut the knot by ignoring the poets' forms as much as possible: in recent times reaction has led to composers sacrificing their own interests in order to be rhetorical, the results of which sometimes please neither the public nor the poets.

But in the classical age, when poets were their own composers, and the two functions were so closely united that no one would think of saying of a dramatist that he was 'a good poet but a poor musician,' or *vice versa*; when, consequently, music and poetry had not had time to develop separately on diverging principles; then, surely, we might reasonably expect, from a nation with the high artistic abilities of Greece, masterpieces of poetry or music—call it which you will, since the two were one individual art—that might fitly compare with those that were produced in the realms of sculpture and architecture. And Mr. Headlam has now shown that such masterpieces were actually produced.

He points out that to a Greek each of the principal lyric metres connoted more or less definite ideas; *e.g.* the trochaic was didactic, the glyconic associated with love or marriage. And further, that transition from one metre to another was managed in a very subtle and ingenious way, to which we find some sort of parallel in modern music. It is not counterpoint, though Mr. Headlam is really logical in calling it so; that is, it is not what a modern musician associates with the word. Counterpoint is defined as the combination of melodies, and Mr. Headlam is certainly justified in considering his rhythms as melodies, and in showing that contrasting specimens are combined. But to us counterpoint implies two or more voices singing different melodies simultaneously, whereas in the Greek lines quoted there is only one voice singing. Mr. Headlam's own musical example explains his meaning to a musician better than his words. The device would be better described as 'overlapping of rhythms.' The two other methods, *link* of one syllable, and *echo*, i.e. the repetition of a figure to lead from one phrase to the next, are common in modern music: the overlapping in Mr. Headlam's way less so, since the effect is better and more easily obtained by polyphony, of which the Greeks knew nothing. The best examples of these devices are to be found in Mendelssohn's *Songs without Words*; the first of Book V. is a good specimen for the purpose. Not that Mendelssohn occupies in modern music a position analogous to that of Aeschylus in Greek tragedy; but the absence of polyphony in the *Songs without Words* makes it easy for the inexperienced reader to pick out the structural devices which abound in them.

The extract from the *Agamemnon* is particularly instructive. I am sorry that it is useless to refer the reader to Sir Hubert Parry's music composed for the performance at Cambridge in 1900; noble and dramatic as it is, it does not illustrate Mr. Headlam's theory. But Mr. Headlam's analysis of the passage makes its musical structure intelligible without

notes. Lines 1-3 are trochaic 'for the expression of stern moral and religious views.' Lines 4-6 are Anacreontic, describing 'the sumptuous delicate luxurious Helen flying eastward with her Asiatic lover,' reaching a climax at the glyconic lines 6-7, a rhythm associated with wedding-songs. This is only momentary; we return to the Anacreontic metre (lines 8-12), leading back to glyconic again (13-15) as the pursuers are described. The antistrophe is modelled on the same lines, not only for rhythm but for subject-matter as well. 'Surely this is very beautiful,' says Mr. Headlam. Surely indeed; it is the same sort of structure as we find in the exposition of the first movement of a Beethoven sonata. We may call the trochaics the first subject: the anacreontics will represent the transition to the second subject, which first attracts our attention with the conspicuous contrasting rhythm of the glyconic, then develops itself in anacreontics again, ending with a *codetta* based on its principal figure. We should naturally expect this to be followed by a contrasting section (of about the same length, roughly speaking) in which the subjects previously announced are 'developed,' *i.e.* presented in various aspects, always with a sense of growth towards a climax; then would follow the recapitulation of the first section, ending with a *coda*. This chorus however is in a more extended form: it might be compared with some of Schumann's experiments in construction. But the fairly common plan of strophe, antistrophe, epode, is natural enough to a musician. The 'development section' falls out, as in many shorter overtures and preludes, and its place is supplied by the *coda*, which as a rule contains some development of the materials already used. The same thing happens, according to Mr. Headlam, in the epode. On the other hand the epode may be quite in contrast to what proceeds; so, in a musical composition, do we sometimes find the *coda*. If Mr. Headlam will publish more analyses of this kind, especially of complete poems, it seems likely that we may find more musical parallels to them.

EDWARD J. DENT.

INSCRIPTIONS FROM CYZICUS.

1.—Funeral banquet stele (one sitting and four reclining figures) found by Mr. de Rustafell near the eastern walls; height 0·61, breadth 0·74, height of letters ·01 metre.

ΔΗΜΗΤΡΙΟΥ
ΤΟΥ ΜΗΝΟΔΩΡΟΥ

Δημητρίου
τοῦ Μηνოდώρου

Δ·ΤΟΥΤΟΥ
ΙΝΟΔΩΡΟΥ

Μηνο ?]δότου τοῦ
Μηνოდώρου

ΗΝΟΔ Ο
ΟΔ Υ

Μ]ηνοδ[ώρ]ο[υ
τοῦ Μην]οδ[ώρ]ο[υ ?

2.—Broken funeral banquet stele found at Yeni Keui; height 0·54, breadth 0·46, letters ·01.

ΙΩΤΙΧΗΣ
ΤΗΣ ΠΟΤΑΜΩΝΟΣ

Ιωτίχης
τῆς Ποτάμωνος

ΡΑΞΙΟΥ
ΤΟΥ ΗΡΑΚΛΕΙΔ

Π]ραξίου
τοῦ Ἡρακλείδ[ου]

3.—Broken stele with bust of man, debased style : at Yeni Keui.

ΝΕΙΚΗΤ . . .

Νεικήτ[ας ?

4.—Broken slab of rough marble, at Yeni Keui; height 0·60, breadth 0·46, letters of late form and irregular.

ΑΥΡΗΛΙΟΣ
ΑΥΞΑΝΩΝ
ΤΡΟΥΔΟΥ
ΜΗΝΟΧΡΗΣΙ
ΜΟΥΠΙΣΤΟΣ
ΤΙΣΑΝΠΟΣΚΟΥΣΙ
ΕΙΣΤΗΑΥΤΩΠΡΟΣ
ΤΟΝΘΕΟΝ

Αὐρήλιος
Αὐξάνων
τρουδου
μηνὸς Χρησί-
μου πιστὸς
(ὅς)τις ἂν π(ρ)οσκοψ(ε)ι<ς>
ἔστ(αι) αὐτῷ πρὸς
τὸν θεόν.

¹ Nos. 1-4 were found by Mr. De Rustafell in 1901. The remainder were collected by Mr. Henderson and myself while engaged on the survey in the summer of 1902. Nos. 1, 4, 5,

8, 9, 10, 12, 13, 21, 22, 23, 24, 25, 26, 27, 30, 31, 32, 33, 34 are from impressions. The photographs I owe to Mr. Henderson.

In ll. 3-4 we have probably a place name ending in -ηνός.

For the spelling of *ποσκόψει* we may compare *C.I.G.* 9266 (= Hamilton 314 Sandukli). The formula *ἔσται* etc. also occurs at Cyzicus in *C.I.G.* 3690 and frequently at Eumenia in the third century Christian inscriptions (Ramsay, *Cities and Bishoprics of Phrygia*, I. (2), 498). *πιστός* perhaps hints at the religion of deceased.

The name *Αὔξάνων* occurs frequently in Christian inscriptions. Ramsay *ad loc. cit.* chap. xii. nos. 389, 390, 391 (*Αὔξάνουσα*), 394, 401.

5. House of Andreas at Yeni Keui. Stele of half-draped man reclining on couch, below which is a dog. The whole between pilasters which support a low arch; height 0·51, breadth 0·33, letters 0·2.

ΛΟΚΗΙΑΣΕΚΟΥΝΔΑΚΛΑΥΔΙΩ
ΑΠΟΛΛΩΝΙΩΤΩΠΑΤΡΙΟΚΑΕΣ
ΚΕΥΑΣΕΝΕΚΤΩΝΙΔΙΩΝΜΕΙΑΣ
ΧΑΡΙΝ

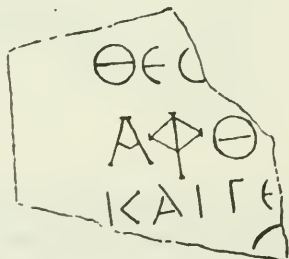
Λοκηία Σεκοῦνδα Κλαυδίῳ
Ἀπολλωνίῳ τῷ πατρὶ ὃ κατεσ-
κέυασεν ἐκ τῶν ἰδίων μνείας
χάριν.

for the spelling *Λοκηία* cf. *C.I.G.* 3662. 7 *Λοκκήϊος*.

6.—Fragment in Yeni Keui on block of marble 35 × 35, letters 0·4 high.

ΟΥ
Ι /
Υ
Σ

7.—Fragment used as doorstep in Yeni Keui 0·48 × 0·61, height of φ 0·17.



θέσ[ις
Ἀφθ[ονήτου
καὶ Γε[μέλλης?

8.—Found by Mr. Henderson near the western shore: 0·65 × 0·40, letters 04.

ΑΙΑΘ ΤΥΧ
ΙΜΗ ΟΥΛΗ
ΙΜΟΥΑΥΡΣΑΝΙ
ΚΗΝΟΣΠΑΝΗΓ
ΣΤΟΝΕΑΥΤΟΥΤ
ΡΙΜΟΝ
ΙΤΑΠΥΓΜΗ
ΓΑΛΛΑΣ
ΝΙΟΣ

Ἀγαθ[ῆ] Τύχ[η].
τῇ δοκ[?]ίμῃ [β]ουλῇ
Τροφ[ί]μου Λύρ. Ξάνθ[ος] ?
Κυζι[κ]ηνὸς πανηγ[υριάρ-
χη]ς τὸν ἑαυτοῦ ε[ὐερ-
γέτην Τρό]φιμον [νεική-
σα]ντα πυγμὴν [ἀνδρῶν ? τὰ
μ]εγάλα Ἀσ[κληπιεία
καὶ ἀγω]νοθ[ετήσαντα ?
(στ) ἐπὶ ἀγω]νοθ[ετοῦντος τοῦ δεινός

Faint traces of a Σ are visible at the end of the second line: we may, perhaps, supply ΣΥΝΤΡΟΦΟΣ or, considering the relations of both persons to the gymnasia, ΣΥΝΕΦΗΒΟΣ. For τὰ μεγάλα Ἀσκληπιεία cf. Dittenberger *Sylloge*², 677, l. 8 (Cos). *B.C.H.* x. 410 (14) (Thyateira). Πανηγυριάρχης and ἀγωνοθέτης are not found elsewhere at Cyzicus. Α Γ. Φλ. Τρόφιμος ἄρχων occurs on a coin of Severus Alexander (*B.M. Catal.* Mysia-Cyzicus, No. 264). This date agrees with the lettering, but the name is very common.

9.—Fragment with moulding letters 03.

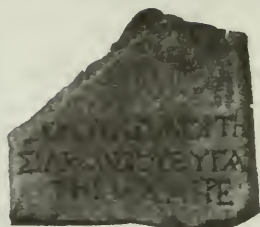
ΣΙΑΝΑΙΣΔΥ
ΡΩΣΦΟΡΟΥΤ

.. σιαναις δω .
.. φωσφορου .

ΤΟΤΗΣΚ
ΥΟΤ

.. ποτησκ .
... υστ . .

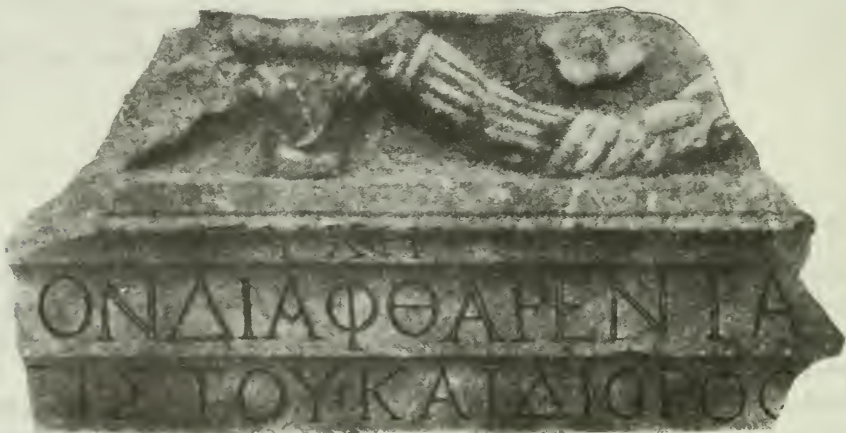
10.—Marble tablet, 0·18 broad, letters ·015, at Yeni Keui.



Σεκοῦνδα Ὀρτη-
οῖα Κοίντου θυγά-
τηρ χαῖρε

For Ὀρτήσιος = Hortensius cf. *C.I.A.* iii. 10 and 1056.

11.—At Cyzicus on western wall, found by Mr. J. Gatheral: broken block of entablature 0·85 × 0·50, comprising (1) frieze of bucrania, (2) cyma, (3) architrave in two fillets. (The height of letters varies with the line; line 1 is on the cyma, and its letters measure ·03: in lines 2 and 3, ·06 and ·05 respectively).



Ἀγα]θῇ Τύχῃ.
? ν]αὸν διαφθαρέντα δ[ιὰ
.. με!]γίστου καὶ διορθω[θέντα

12.—In porch of Church of S. George in an island on Panderma bay marble slab 1·00 × 0·48, letters ·08.

ΑΝΝΑΒΑΡΙΟΥ

*Anna Βαρίου.

13.—From hut on mainland opposite S. George. Small stele of woman, dog, and slave 0·20 × 0·14, letters ·01, now at Yeni Keui.

ΜΗΤΡΟΦΙΛ
ΑΡΙΣΤΑΣ
ΤΡΟΦΙΜΗ ΧΑ ΡΕ

Μητρόφιλ[ε
Ἀρίστας
Τροφίμη χα[ί]ρε

The incongruity of the sculpture with the inscription and the grammar of *χαῖρε* find many parallels.

Another small stele, uninscribed and of poor workmanship, remains in the hut. Strabo speaks of a *προάστειον* opposite the city (575 ad fin.), and worked blocks are fairly common here.

14.—Panderma: in wall at Hagia Trias: fragment of stele with remains of standing figure of Asclepius 0·25 × 0·17, letters '015.

ΥΠΕΡ ΥΙΟΥ ΕΥΧΗΝ
ΑΣΚΛΗΠΙΩ

[ὁ δεῖνα]
ὑπὲρ υἱοῦ εὐχῇ
'Ασκληπιῷ.

Hitherto the only monument of Asclepius worship at Cyzicus, unfortunately late. A temple of A. shared with Apollo is mentioned *Ath. Mith.* ix. 28, (32) (Eski Manyas); see note on the Asclepiadae below.

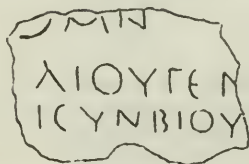
15.—*ib.* Banquet stele '60 × '49 of three persons; letters '01.



Τιμόλαε
Σελεύκου
χαῖρε

Διονύσιε
Τιμολάου
χαῖρε.

16.—*ib.* at Hagia Trias: fragment.



ἰπ]όμν[ημα
'Ιου]λίου Γεν[τιανοῦ?
κα]ὶ συνβίου

17.—Panderma : in wall of Greek school, high up : Funeral stèle (seated woman).

ΤΡΥΦΩΣΑ ΚΛΕ
ΧΑΙΠΕ

Τρυφῶσα Κλε[άνδρου ?
χαῖρε

18.—*ib.* : in south wall of Armenian Church, high up : Banquet stele (four men).

ΟΣΧΙΟΥ ΜΕΝΑΝΔΡ
ΧΑΙΠΕ ΧΑΙΠΕΤΕ

(ὁ δεινα) (ὁ δεινα)
Μ[οσχίου Μενάνδρ[ου
χαῖρε χαίρετε

19.—*ib.* house of Mustapha Tchaoush : relief of sacrifice to Zeus : left slave killing ox ; centre, altar with tree² above, on which eagle ; right, Zeus standing draped holding patera and staff.

ΣΙΜΩΝΙ ΤΕ ΤΟΥΤΟΙΣ

Ὀνή]σιμος ὑπὲρ Εὐσεβείας

For the name Εὐσεβεία cf. below No. 36 ; it may be the common noun (as *C.I.G.* 3642), but the first is more in accordance with Cyzicene formulae. The type is similar to that of the stele from Sari Keui, now in the British Museum, described in *Ath. Mitth.* ix. 58, *Rev. Arch.* 1891, 10 (though this is earlier), and almost identical with another stele said to be from Nicaea (Conze, *Lesbos Pl.* xviii.) which tends to confirm Mordtmann's suggestion (*Ath. Mitth.* x. 200, 30) that the Cybele stele (Conze *ad loc. cit.* p. xix.) is really from the Cyzicus neighbourhood ; but no stelae of known Cyzicene provenance are dated, and as far as the inscription is concerned, the 'Nicaean' stelae are more closely paralleled by a stele from Triglia near Mudania (*B.C.H.* xvii. 545). Cyzicus possessed lands in the region of Dascylion (*Strabo*, 551, 582) which may be the provenance of all three.

Zeus Ὑψιστος (see Rainsay, *Phryg.* I. 33) is known at Cyzicus from two inscriptions *B.C.H.* xvii. 520 (1) = *Rev. Arch.* 1891, 10, *J.H.S.* xxii. 267, ? *B.C.H.* xvii. 520 (7) ; cf. also *C.I.G.* 3669 θεὸς Ὑψιστος, and Zeus Ὑψιστος Βρονταῖος Le B.-W. 1099, Mihallitch.

20.—Aidinjik, curbstone in Armenian quarter : letters about '06.

ΣΑΚΕΔΟΤΟΓ

Σακε(ρ)δότος

for the name Sacerdos cf. *C.I.G.* 3953, (Attouda) 4058 (Ancyra).

21.—*ib.* at Armenian Church, lower half of small stele : letters '02.

ΗΡΑΚΛΕΙΔΙ
ΧΑΙΠΕ

Ἡρακλείδ[η
χαῖρε

² The tree, which figures largely in Cyzicus stelae (cf. e.g. No. 38, 39 below) is interesting in connection with the Life of S. Philetaerus (*Vitas Sancti.* 19 May. ch. iii. § 28) where the Christians cut down the cypresses that stood

towards the east διὰ τὸ μάλιστα τοὺς Ἕλληνας ἐν ἐκείναις ταῖς κυπαρίσσαις πλείον τὰς θυσίας ἐπιτελεῖν. There are still some very fine cypresses on the way to Aidinjik.

22—*ib.* similar fragment.

ΚΑΜΠΤΗΡΟΣ
ΟΥ ΑΠΟΛΛΩΝΙΟ

Καμπτήρος
τ]οῦ Ἀπολλωνίου[υ

23.—*ib.* Stele showing *left* female figure seated facing holding up hands from elbow; on each side of her a smaller figure; *right*, man standing facing in *himation*; letters 015.



Ἀσκληπιάς
Ἀσκληπιάδ[ου
Περγαμηνή χαίρει

24.—Stele 0·58 × 0·45, letters 03, a wreath in relief above inscription.

ΣΕΚΟΥΝΔΑ ΚΡΙΣ
ΠΕΙΝΑΣΟΡΗΣΙΑΣ
ΘΥΓΑΤΗΡΚΑΤΕΣΚΕΥ
ΑΣΕΝΤΗΜΗΤΡΙ

Σεκοῦνδα Κρισ-
πέϊνα Σορησίας
θιγάτ(η)ρ κατεσκέυ-
ασεν τῇ μητρί

25.—*ib.* fragments of small stele : letters '01.

(below relief) ΑΡΙ . . ΚΕΡΚΙΩΝΟΣ Ἄρι[ε] Κερκίωνος
 ΧΑΙΡΕ - - - χαῖρε
 (up right side) ΟΚΑΤΕC [κεύασεν ὁ δεῖνα

26.—Two fragments of large slab with irregular letters.

+ ΘΕCICΔΙΑΦΕF
 CΔΤΡΥΦΟΝΟCΠ
 ΠΟΥΛΟΥΚΔΙΤΩΝ
 Κ ΧΙΡΟΝΟΜΟΝΔΥΤΟΥ

+ θέσις διαφέρ[ου-
 σα Τρύφ(ω)νος Π[απα ?
 πούλου καὶ τῶν
 κλ(η)ρονόμ(ω)ν αὐτοῦ

27.—A similar fragment.

Ρ ΘΕCICΛ
 Χ ΟΥΜΟ
 ΡΛ

θέσις Ἀ[ντιό ?
 χου . . .

28.—*ib.* In Armenian house near the church : stele of Cybele enthroned facing ; 0·32 × 0·23, letters '02.

- - ΣΙΤΕΙ - - -

A local epithet of Cybele is probably the solution.

29.—*ib.* Fragment 0·20 × 0·13, letters '02.



Possibly :

ὑπ[όμνημα ὁ κατεσκεύασεν - -
 ἥσι[ος] ἑαυτῷ καὶ τῇ γυναικὶ καὶ τῷ
 παιδ[ι] ἐκ τῶν ἰδίων χρημάτων ? ἔαν
 δὲ κα[ταθήσῃ] ἄλλος ἄλλον νεκρὸν
 ἢ συ[λήσῃ] δώσει τῷ ταμείῳ
 Χ,α [καὶ etc.

30.—*ib.* House of Hirjeki Oglu Sirkiz, marble slab 0.65×0.50 broken at bottom and right edge: letters 0.275 and 0.15.

ΙΠΠΑΡΧΟΥΝΤΟΣ
ΙΟΥΛΙΟΥ ΜΑΙΟΡΟΣ
ΕΚΟΜΙΣΑΝΤΑ ΔΙΚΑΙΑ
ΠΟΛΕΙΤΕΙΑΣ ΕΠΙΦΥΛΑΡΧ
ΜΕΝΕΜΑΧΟΥ, ΦΥΛΙ-ΙΣ
ΤΙΒΕΡΙΟΣ ΙΟΥΛΙΟΣ ΦΑΙΝΟΣ
ΓΑΡΙΟ-

Ἰππαρχοῦντος . . .
Ἰουλίου Μαίωρος [οἶδε
ἐκόμισαν τὰ δίκαια [τῆς ?
πολετείας ἐπὶ φυλάρχ[ου
Μενεμάχου φυλῆς . . .
Τιβέριος Ἰούλιος Φαῖνος
Γ. Ἄριος . . .

The formula is probably entire: the inscription appears to be a list of persons who 'received the rights of citizenship' (ἐκόμισαν τὰ δίκαια³ τῆς πολιτείας) and dates from the second or third century A.D. *C.I.G.* 3665 a list of *ephebi* is somewhat similar, the ephebarch being mentioned in place of the phylarch: the latter officer appears frequently in inscriptions of Cyzicus, *e.g.*: *C.I.G.* 3663, 3664, *Ath. Mitth.* x. 200 (28), vi. 42 (1), xxvi. 121, etc.

The eponymous hipparch (whose praenomen probably filled the space at the end of line 1) is hitherto unknown (cf. lists in *Ath. Mitth.* x. 200, *J.H.S.* xxii. 200).

No tribe-name (for tribes see Marquardt *Cyz.* p. 52 ff.) seems short enough for the space after φυλῆς: a number may have been substituted as in *C.I.G.*, 4018, 4019, etc. (Ancyra) Le B-W. 1036 (Alexandria Troas).

30a.—The inscription (*B.C.H.* xiv. 520 (38)) in the Greek church reads more fully:

Ἐπὶ μνημα [. . . |]ου τοῦ Ἐπαφροδίτου ὃ κατε[σκεύα]σεν ἑαυτ[ῶ] . . .

31.—On mainland near Aidinjik road, marble block $0.75 \times 0.54 \times 0.55$ with relief of horseman and dog: letters 0.2

³ For δίκαια = *iura* cf. *C.I.G.* 1436, 1440 τέκνων δίκαιον = *ius liberorum*.



Ῥπόμνημα

Αὐρ. Ἀπολλοδώρου νιοῦ Ἀπολλ[οδώρου
ὁ κατεσκεύασεν ἑαυτῷ ἐκ τῶν ἰδί[ων
κ]αὶ τοῖς ἑαυτοῦ [ἐκ]γόν[οις
Α]ὐρ. Ἀπολλοδώ[ρω
καὶ τῇ ἑαυτοῦ [γυναικὶ
Χ]ρ[υσ]οθύμιδι (sic) καὶ τῇ θρεψύσῃ αὐ-
τοῦ Ἐπικτήσ(ει) [κ] τοῖς τέκνοις αὐτῇ[ς
τοῖς δὲ λοι[ποῖς ἀπαγο]ρεύ[ω. εἰ δέ τις κατ[αθήσῃ
ἄλλον δ]ώσει (εἰ)ς τό ταμεῖον (δημῖα) . . .

l. 8 stone reads ΕΠΙΚΗΣΙΣ.

32.—*Ib.* in wall; marble fragment 0·27 by 0·36 letters (very well cut) 0·03 high (there have never been more than two lines, apparently of hexameters).

ΔΕΔΥΝΑΤΟΤΙ
ΑΤΟΙΣΓΕΠΟΙΗ-ΚΕ

. . . ος δυνατός το
. . . ατοῖς πεποίηκε . .

33.—Hammanli. In a house wall, marble block 0·42 × 0·12, letters irregular.

ΙΩΑΝΝΟΥ ΠΡΕΒ

Ἰωάννου πρε(σ)β[υτέρου

For πρεβ. = πρεσβυτέρου cf. *J.H.S.* xix. 130. πρεβτέρου *C.I.G.* 9163.

34.—At Yapajik (on the peninsula, above Hammanli), in the fountain, large fragment of marble sarcophagus 0·75 × 1·29, letters 0·04 to 0·03, the second line erased, the left side water-worn, the right broken off.

ΑΙΙΙΙ ΣΥΝΟΣΤΟΥΒ ΥΠΟΜΝΗΜΑ
 ΚΑΙΤΗΓΥΝΑΙΚΙΑΥΤΟΥΑΓΑΘΕΑ ΑΓΑΘΩ
 ΓΟΡΕΥΩ ΕΙΔΕΤΙΣΑΝΥΖΑΕΤΕΡΟΝΒΑΛΗ
 ΗΣΥΝΒΟΥΛΕΥΣΗΗΤΠΡΟΞΕΝΗΣΗΗΑΓΟΡΑΣ
 ΙΙΔΟΛΟΝΤΟΝΦΟΝΤΟΙΗΣΗΤΠΕΡΙΤΟΜΗΜΕΙΣ
 ΤΑΙΜΛΑΙΣΚΑΙΓΕΝΟΕΤΟΕΚΕΙΝΟΥΔΩΛΕΙΔΕΚΤΩΙΙ
 ΕΙΝΔΕΟΙΔΑΙΜΟΝΕΣΤΕΤΑΓΜΕΝΟΙ ΑΠΟΑΝΑΤ

Ὑπόμνημα

Ἀρτέμωνος? τοῦ Β', τοῦ καὶ Σκύμνου? [ὃ κατεσκεύασεν ἑαυτῷ
 καὶ τῇ γυναικὶ αὐτοῦ Ἀγαθέα Ἀγάθωνος, τοῖς δὲ λοιποῖς ἀπα-
 γορεύω· εἰ δέ τις ἀνύξας ἕτερον βαλῇ [νεκρὸν τινα χωρὶς ἐμοῦ?
 ἢ συνβουλεύσῃ, ἢ προξενήσῃ ἢ ἀγοράσῃ ἢ πωλήσῃ τὸν τόπον?
 ἢ δόλον πονηρὸν ποιήσῃ περὶ τὸ μνημεῖον, καὶ ἐκεῖνος γενήσε-
 ται μανεῖς καὶ γένος τὸ ἐκείνου, δώσει δὲ καὶ τῷ ἱερῷ ταμείῳ Χβφ', διώξου-
 σιν δὲ οἱ δαίμονες οἱ τεταγμένοι ἀπὸ ἀναπ[αύσεως]

Ἀρτέμων Β' occurs in a Cyzicene inscription published in *J.H.S.* xxii. p. 204, l. 23. Σκύμνος is conjectural, but fits the space, and the slight remains of lettering;⁴ for the spelling ἀνύξας cf. *Ath. Mitth.* vi. 121. 10 (Cyzicus) *C.I.G.* 3683 (Eumeneia) Le B-W. 1771 (Kespit) *B.C.H.* iv. 514. Δόλον πονηρὸν is a literal translation of the legal Latin '*dolus malus*' cf. Dittenberger, *Sylloge*,² 319. Χβφ=(δηνάρια) 2500 is the usual sum mentioned as the fine for τυμβωρυχία. For the elaborate curse on sacrilegious persons cf. *C.I.G.* 2829, 2831, 2832, 2834, 3915, 4303, Le B. 1104 (Mihallitch) *ib.* 1764a, and the remarkable *C.I.G.* 3891, λήψεται παρὰ τοῦ ἀθανάτου θεοῦ μύστιγα αἰώνιον: but I can find no exact parallel, and the restoration is a suggestion only, based upon the original length of the stone as given by the distance from the middle of ὑπόμνημα to the left edge. πωλήσῃ is warranted by *B.M. Inscr.* III. 648, 649. (Ephesus.)

35.—*ib.* in a private house, broken marble slab partly hidden by stair. The first inscription has well-cut letters 0·14 high, the second, thin and narrow letters 0·13 high, on sunk tabula ansata.

⁴ The second names are very frequently added at Cyzicus; after δ Β' they are evidently for distinction between father and son, cf. Ἀσκληπιδίου Β' Ξενάρχου, *Ath. Mitth.* vi. (42) 2, l. 54, Ἐπαφρόδιτος Β' Θεῖσας, *J.H.S.* xxii. 201. Π. Αἰλ. δ ἐπίκλην Σωσίας, δ καὶ Κρίσιμος, cf.

also *C.I.G.* 3664. In *Ath. Mitth.* vi. 42 (1), Περιγένης δ καὶ Σκοπάνης, Εὐτυχίων Β' Μαιουγῆς, *ib.* xxvi. 121, the second name is barbarous, and in *C.I.G.* 3705 (Apollonia ad Rh.) we have the Greek and Roman names, Ἑρμᾶς δ καὶ Μερκούριος.

ΑΝΔΙΓΟΝΗ

Ξ ΤΩΓΛΥΚΥ

Ἐπόμνημα Ἰ'Ανδιγόνη[ς (?) ὃ κατεσκεύασεν ἑαυτῇ
(καὶ) τῷ γλυκυτάρτῳ ἀνδρί . . .

I can see no other restoration of the first line, though I have no parallel for the spelling. In l. 2 the symbol κ is used for *καὶ*. Ramsay (*Cities and Bishoprics of Phrygia* ch. x. app. I. p. 379), comments on the frequency of mythological and epic names in the Phrygian district, cf. above No. 31 *Χρυσόθυμις*.

36.—*ib.* In another house, fragment 0·62 broad, letters about 0·8.

ΕΥΣΕΒΙΑΣ
ΛΑΝΤΡΟΣ

Εὐσεβίας
Λανπρός

For the name *Εὐσέβεια*, cf. *C.I.G.* 3574, 3757.

37.—*ib.* house of Papadoghlu Costakis, fragment 0·97 broad, with irregular letters.

ΓΥΝΕΚΙ . . . ΙΟ
+ΘΕΣΙΣ ΔΙΑΦΕΡΟΣΙΣ ΔΙ
(ΤΕΩ) ΑΝ(Ι)ΥΛΙΠΛΑ . . . ΚΗ
ΔΙΑ

γυνεὶ
+θέσις διαφέρο(ν)σα
. . . (Ἰ)ωάν(ν)η καὶ Πλακη-
δίλ[λη]

An extraordinarily illiterate text calling for drastic restoration, cf. *J.H.S.* 97-417 (19) *ΗΘΑΝΗ* = Ἰωάννης; *Πλακήδιλλα* apparently a diminutive form of *Placida*.

38.—From *Sarikeui* (*Zeleia*), now at *Yeni Keui*. Small stele 0·36 × 0·22 with relief of *Hekate*? enthroned facing: with her right hand she extends a patera to two worshippers who approach her altar (behind it is a tree) with a victim. To her left is a dog seated, letters 0·125.

ΑΣΚΛΗΓΓΑ	Ω	Ἀσκληπᾶς [Ποτάμ?]ω
ΝΟΣΥΓΓΕ		νος ὑπέ[ρ] ἑαυτοῦ
ΚΑΙΤΗΣ		καὶ τῆς[γυναικὸς :
ΦΙΛΟ		Φίλο . . .

For Hekate Artemis at Cyzicus cf. the relief in Perrot and Guillaume *Galatie*, Vol. II. pt. iv., and A.M. ix. 63 (?). A mutilated Hekate triformis was brought to Mr. de Rustafell in December 1901.

A fragmentary inscription in a house opposite St. John's Church in Artaki, which I was not allowed to copy, may perhaps be recorded from my note book: the stone is broken on both sides and the letters are about .03 high. The general sense runs 'Τ]πόμν[ημα Ἀλεξάν]δρου τοῦ [δεῖνος ὁ] κατεσκεύασεν ἑαυτῷ καὶ τῇ θυγατρὶ αὐτοῦ Ἑρμιό[νη. I have not ventured to bracket the restored portions in the middle of the inscription, as the whole depends ultimately on my memory and is of course subject to correction.

39.—By the kindness of Dr. Washburn I am enabled to publish the inscription on the larger of two votive stelae preserved in the Museum at Robert College, Bebek. They were both brought from Cyzicus by Dr. Long, and probably belong to the series of stelae found near Artaki and mentioned in *Σύλλογος* vii. p. 164 (commentary on inscr. 5): most of these, Dr. Mordtmann told me, found their way to Tchinklykiosk.⁵ The smaller Bebek stele exhibits a relief of sacrifice to Apollo Citharoedus, and, Mr. Henderson tells me, scant remains of an inscription: the larger has two reliefs, (1) worship of Apollo, tree in background: (2) *crater* flanked by (r.) female figure carrying cushion on her head, (l.) boy leading ram. The *crater* is prominent in the upper relief of *C.I.G.* 3669 and evidently refers to the sacred feast which was a characteristic feature of the local religion, cf. *B.C.H.* xxiii. 592. I am indebted to Mr. Henderson for sketches of these stelae: the larger reads:

ΜΗΔΕΙΟΣΚΑΙΔΙΟΔΩΡΟΣ	Μηδεῖος καὶ Διόδωρος
ΟΙ ΑΔΑΜΑΝΤΟΣ ΑΠΟΛΛΩΝΙ	οἱ Ἀδάμαντος Ἀπολλῶνι
ΚΡΑΤΕΑΝΩ ΧΑΡΙΣΤΗΡΙΟΝ	Κρατεανῷ χαριστήριον

Of Apollo Crateanos (from Crateia in Bithynia?⁶) we have numerous stelae from near Eski Manyas,⁷ and one from Cyzicus is published in *B.C.H.* xvii. 521. The former read consistently *εὐχὴν* for the Cyzicene *χαριστήριον*: the Apollo is invariably of the Citharoedus type, and the inscriptions date from the first century B.C. or earlier, all names being Greek.

The uninscribed stele (measuring some .60 by .30 metre) of Apollo Citharoedus standing full face holding the lyre in his left hand, and patera

⁵ No. 189 (provenance unknown) dedicated Ἀπολλῶνι Προκέντῃ καὶ Ἀρτέμιδι χαριστήριον by two persons probably belongs to the series: the style of the relief is identical.

⁶ *Arch. Zeit.* 1876, p. 113.

⁷ *Ib.* 1875, 162. *Arch. Epig. Mitth.* xix. 59. One is illustrated in Benndorf, *Lykien*, p. 154.



in his right, which was found by Mr. Th. Makrys and myself at the Armenian church in Aidinjik, possibly belongs to the series.⁸ In the archaistic treatment of the drapery it probably copies a cultus image.

Apollo in the Cyzicus district seems to be identical with the son-god of Phrygia. His connection with Zeleia is mentioned so early as Homer, (*Il.* 2. 827, cf. also *Schol. ad Il.* iv. 103), and his immense popularity in the *villages* (μάλιστα κατὰ τὴν ἐφορίαν τῆς Κυζίκου) is remarked by Strabo.⁹ At Cyzicus itself he was ἀρχηγέτης,¹⁰ as at Hierapolis,¹¹ and on at least one stele from Cyzicus¹² he is associated with the mother of the Gods. He appears again with Zeus "Τψιστος and Artemis Hekate in *Rev. Arch.* 1891, 10. (1), with which we may compare the conjunction of gods in Ramsay *Phrygia* 2 566, No. 468, and possibly the τρίτευμα of Ramsay *op. cit.* I. 337, 171.

For other monuments of Apollo at Cyzicus see *C.I.G.* 3669 (with Artemis) = Σύλλογος vii. 164 (5): *Ath. Mitth.* ix. 25: *Rev. Arch.* 1891, p. 10 Ταδοκωμελής, *Ath. Mitth.* ix. 18 (4): *ib.* x. 200, (34), and for literary sources Marquardt *Cyzicus*, p. 128 ff.

F. W. HASLUCK.

⁸ I saw in the same place the lower part of a small stele much worn representing a statue of Apollo approached by five worshippers, and another fragment with a bull couchant, apparently from a sacrificial scene.

⁹ P. 551.

¹⁰ Aristides, 1, 383.

¹¹ Ramsay, *Phryg.* 1, 87 ff.

¹² *Ath. Mitth.* x. 200 (30). Mordtmann aptly compares Conze, *Lesbos*, Pl. XIX.

NOTE ON THE FAMILY OF THE ASCLEPIADAE AT CYZICUS.

In the *Athenische Mittheilungen* (ix. 28. (32)), Dr. Lolling published without comment upon the subject matter an inscription said to have come from Eski-Manyas, but evidently referring to Cyzicus, of which a portion survives in a very worn condition, built into the well-head of Hagia Triada at Panderma. The inscription dates from early Imperial times and commemorates one Demetrius, son of Oeniades, son of Asclepiades, and several members of his family who had rendered important services to the state.

The text of the inscription is, for the sake of clearness, given in minuscule below.

- [ό ά]να
 εν επισχεο
 δωνα ανα . . . με
 και τους α[λλου]ς [π]ο[λί]τας
 5 αυτων επι [διασ]αφησ[ιν] νδι
 κήρυκ[ος] δημοσ[ία] ? τὸ πρᾶ[γμα] ? Δη-
 μήτ[ριον] Οϊνιάδ[ου] ἀρ[ε]τῆς ἔν[εκεν] καὶ εὐνοίας
 στεφανοῦσθαι δὲ αὐτὸν καὶ ἐν τοῖς . . μένοις ΙΥΑ'
 τῶν Ῥ[ω]μαίων [ἀ]ναγορεύοντος [τ]οῦ κ[ήρυκο]ς ὅτι [ό] δῆμος στεφανοῖ
 [Δημή]-
 10 τριον Οϊνιάδο[ν] πάση[ς] ἀ[ρ]ετῆς [ἔ]ν[εκεν] ὁμ[ο]ίως δὲ στεφανοῦσθαι
 αὐτὸν καὶ
 ἐν τοῖς κατ' ἐνιαυτὸν τιθεμ[έ]ν[οις] εὐχ[α]ριστηρίοις ἀγῶσιν Ἡρώοις
 τῷ πάπ-
 πῳ αὐτοῦ Ἀσκληπιάδῃ τῷ οἰκ[ιστῇ] καὶ τ[οῖς] συναγωνισαμένοις αὐτῷ
 κατ' Ἀ-
 λεξανδρείαν ἐν τῷ [κα]τ[ὰ] . . . πο[λ]έ[μ]ῳ μετὰ τὰς τοῦ πατρὸς αὐτοῦ
 καὶ τοῦ θείου στεφανώσεις [ἀναγ]ο[ρεύοντ]ος [τ]οῦ κήρυκος ὅτι ὁ δῆμος
 στεφανοῖ
 15 Δημήτριον Οϊνιάδου τοῦ Ἀσκληπιάδου πάσης γενόμενον ἄξιον τιμῆς τῇ
 πατρίδι, ἀνατεθῆναι δὲ αὐτῷ εἰκ[όνα] τελείαν γραπτὴν ἐν ὅπλῳ
 ἐπιχρύσῳ καὶ [ἄγ]αλμα μαρ[μάριν]ον [ἐν] τῷ Ἀσκληπιοῦ καὶ Ἀπόλλωνος
 ἱερῶ(ι)
 ὅφ' ἂ ὑπογράψαι ὅτι ὁ δῆμος Δημήτριον Οϊνιάδου τοῦ Ἀσκληπιάδου
 διὰ τῆς
 ἔκ τε αὐτοῦ καὶ τῶν προγόνων εἰς τὴν πόλιν εὐεργεσίας ἀνατεθῆναι
 20 δὲ καὶ στήλην [λε]υκῇ[ν] λιθ[εία]ν[ν] πρὸ τοῦ γυμνασίου ἐν τῇ κατασκευ-
 αζομένη στοᾷ [τῷ] δῆμ[ῳ] ὑπὸ τοῦ ἀδελφοῦ αὐτοῦ Διονυσίου τοῦ
 Οϊνιάδου ἐκ τοῦ ἰδίου βίου ἐφ' ἣν ἐν τῇ συντελουμένη ὑπὸ τοῦ δῆ-
 μου καταδρομῇ τοῦ πατρὸς αὐτοῦ Οϊνιάδου τοῦ Ἀσκληπιάδου

- 25 ἀγομένοις κατ' ἐνιαυτὸν ὑπὸ τῶν ἀρχόντων τοῦ γυμνασίου ἀπὸ τοῦ
 Ἡρώου, τοὺς δὲ νέους καὶ ἐφήβους καὶ παῖδας τὴν ἐσομένην στεφάνω-
 σιν αὐτοῦ [παρὰ] ἔμπειν καὶ ἐπισημοῦσθαι ἀναγορεύοντος τοῦ κήρυκος
 30 οἷο δὲ ὁ δῆμος στεφανοῖ Δημήτριον Οἰνιάδου τοῦ Ἀσκληπιάδου τῆς διὰ
 προγόνων εὐ[ν]ο[ί]α[ς] εἰς τὸν δῆμον ἔνεκεν, ποιουμένου τὴν ἐπιμέλειαν
 τῆς ἀναγορεύσεως τοῦ στεφάνου τοῦ κατ' ἐνιαυτὸν γυμνασάρχου,
 ἀναγραφῆναι δὲ εἰς τὴν στ[ήλην], καὶ ἀντίγραφον τοῦδε τοῦ ψηφί-
 ματος, τὸ [δε] ψήφισμα [εἶναι ὑπὲρ τῆς σ]ωτηρίας τῆς πόλεως.

The name Asclepiades, a particularly common one at Cyzicus, at once throws our thoughts back to the Healing God, and in its present connection to the sanctuary of Pergamon,¹ whose relations with Cyzicus are well-known.² The family probably migrated to Cyzicus during the period of Pergamene influence when to judge by the inscription before us, Asclepius was settled in a pre-existing temple of Apollo: such an arrangement finds many parallels.

We can trace the Asclepiadae as early as the second half of the second century B.C. A Machaon son of Asclepiades served on several embassies and fought for Cyzicus in the war with Aristonicus,³ and as late as Gallienus we find an Asclepiades serving as strategos.⁴

The inscription before us reveals the family's history for three generations. The persons mentioned are:

(1) Asclepiades,⁵ grandfather of Demetrius, who served in the Alexandrian⁶ war, and in whose honour the Heroa were instituted (l. 11).

(2) Oeniades, father of Demetrius, crowned (l. 14), assisted in the building of a *καταδρομή*, possibly some kind of *cryptoporticus*. Aelian N.A. ix. 1, etc., uses the word of a beast's lair.

(3) Uncle of Demetrius crowned (l. 14).

(4) Demetrius, awarded two crowns,⁷ proclamation, life-sized picture on a gilded panel, and a marble statue in the temple of Apollo and Asclepius.

(5) Dionysius, brother of Demetrius, who built a portico for the city.

Two other inscriptions⁸ relating to 'Cleidice daughter of Asclepiades,' who held several important priesthoods at Cyzicus, and was honoured by a

¹ Cf. inser. 23 above.

² Cf. Marquardt *Cyzicus*, p. 72 ff., and *J.H.S.* xxii. 193.

³ *Monatsb. Kön. Preuss. Akad. Berl.* 1889, i. 367.

⁴ Mionnet. *Supp.* 460, 461; *Wadd. Coll.* 770. Cf. also *Ath. Mitth.* vi. 42 (2) *γραμματεύοντος Ἀσκληπιάδου β' ἑνάρχου*.

⁵ Why is Asclepiades called *οἰκιστής*? Can he have founded an Asclepiad colony at *Poemanenon*, where stood a 'holy and famous' shrine of Asclepius in Aristides' day (l. 502, Dind.)? It is curious that another Asclepiad honorary inscription comes also from Manyas (*Rev. Arch.* 34, 1877, 102, (4) *Hamilton* 318)

which has been frequently identified with *Poemanenon*; but cf. *Journ. Roy. Geog. Soc.* 1897, p. 160.

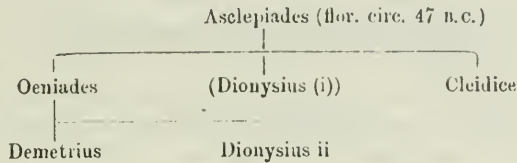
⁶ The letters after Ἀλεξανδρείαν, ΕΝΤΩΙ. ΑΤΛΙΙΟ . . . ΛΥ ΑΙΜΩΙ must surely be restored ἐν τῷ κατὰ Πτολεμαίων πολέμῳ. Hirtius (*de bell. Alex.* 13) tells us that Caesar's fleet included twelve ships 'from Asia.' The Cyzicenes also sent a contingent to help Caesar against the Pompeians in Africa. *C.I.G.* 3668.

⁷ The first festival mentioned, 11. 8-9 ἐν τοῖς [τιθε?] μένοῖς [ἀγῶσιν? . . . ὑπὲρ] τῶν Ῥωμαίων is perhaps the Μουκίεῖα (see *J.H.S.* 1897, p. 268, [27])

⁸ *C.I.G.* 3657. *Ath. Mitth.* vii. 152.

religious guild with a statue and a picture, seem to me to belong to the records of the family. In the former the dedicators ask for the concession of a place for the statue ἐν τῇ ἀνδρῆα ἀγορᾷ ἐπὶ τοῦ προγονικῆς⁹ αὐτῆς συνεδρίου τοῦ ἀπὸ δύσεως τοῦ ἀνδριάντος τοῦ ἀδελφοῦ αὐτῆς Διονυσίου τοῦ Ἀσκληπιάδου, which shews that her family had been influential at Cyzicus for several generations: moreover we have seen that the name Dionysius was in the family and that an uncle of Demetrius was crowned.

The stemma would thus stand:



A lucky find may enable us to fill the gap between Machaon (c. 130 A.D.) and Asclepiades, or to establish the connection of Hippias son of Asclepiades (*Rev. Arch.* 34. 1877. 102. (4)).

I take this opportunity to make the following corrections and additions to my article in *J.H.S.* xxii. 126 ff.

P. 131, *Note* 8. I could hear nothing of the inscription *Ath. Mitt.* vi. 42 at Cyzicus, but venture to suggest the following restoration (which involves very slight changes in the text) of the still incomplete ll. 3—6. Σέξτον Ἰούλιον [Κότυν Κότυ]ος δυνάστου Θρα[κῶν νι]ὸν ὄν[τα] καὶ θυγατ[ριδοῦν τοῦ Θρακ]ῶν δυν[άστου] Ῥοι[μητ]ράλκα, βασι[λίσσης], etc. S. Julius Cotys may be a brother of the C. Julius Cotys mentioned on a coin of Laodicea struck under Titus (*Coll. Wadd.* 6271).

P. 132, *Note* 1. This prince has been identified with Satala, grandfather of Cotys by Mommsen (*Eph. Epig.* II. 251) who rightly insists that Tryphaena was married to Cotys when she became priestess of Livia (*ib.* 255). The chronology of Tryphaena has lately been discussed from coins by M. Th. Reinach *Num. Chron.* 1902, I. 4.

ib. *Note* 7. I prefer to consider that pirates (cf. *C.I.G.* 3612) were the cause of the blocking of the *euripi*. The manoeuvre is designed to secure communication with the mainland, thus implying that an attack was feared from the sea. The Thracian troubles were internal.

F. W. H.

⁹ Cf. l. 19 of the Demetrius inscription: τὰς ἐκ τε αὐτοῦ καὶ τῶν προγόνων εὐεργεσίας It may be noted that one of the signatories of the proposed inscription for the statue in (2) is

also a son of an Asclepiades, but adds his grandfather's name to distinguish him from Cleidice's branch.

EARLY SELEUCID PORTRAITS.

[PLATES I., II.]

THE following enquiry has been undertaken in the hope that it may assist in clearing away some of the difficulties that surround the identification of the royal portraits occurring on silver coins that bear the simple inscription ΒΑΣΙΛΕΥΣ ΑΝΤΙΟΧΟΥ. '*Incerta omnia et ambigua*' was the verdict with which Eckhel dismissed his discussion of the question. Since that judgement was pronounced, not a little light has been thrown on the dark places of the Seleucid series. This particular problem, however, still awaits a final solution. Under present conditions, most numismatists will be ready to admit that their own opinions are not undeserving of the description applied by Eckhel to those of Vaillant—'*vaga, fluctuantia, et saepe secum ipsis pugnantia.*' My experience in connection with the Hunter Cabinet has convinced me that what I may call the method of general attack is not likely to carry us far beyond the point that has been already reached.¹ If there is to be further progress, there must be a change of tactics. Attention must be concentrated on well-defined groups, which should be subjected to as close a scrutiny as possible. If this is done systematically, there can be little doubt but that the tangled skein will be unravelled. The present paper is intended to furnish a specimen of the line of treatment I would advocate.

A short statement of the case may be useful. From the time of Antiochus IV. onwards, the Seleucid kings were in the habit of placing upon their coins the surnames or distinctive titles by which they were known. The various portraits of the later monarchs can thus be determined with almost as much ease and certainty as can the portraits of the Roman Emperors. But, during the first hundred and thirty years of the dynasty's existence the practice alluded to was, with one fortunate exception, absolutely unknown.² The exception is the title Soter, which, as we learn from Appian (*Syr.* 65), was bestowed on Antiochus I. in recognition of his having

¹ Besides the indispensable catalogues of Prof. Gardner (*Seleucid Kings of Syria*, London, 1878), and M. Babelon (*Rois de Syrie*, etc., Paris, 1890), see the late Sir E. H. Buxbury on 'Unpublished Coins of the Kings of Syria'

in *Num. Chron.*, 1883, (3rd series, vol. iii).

² It is possible, on other grounds, to distinguish satisfactorily the portraits of the first four kings who bore the name of Seleucus. See Gardner, *Seleucid Kings*, pp. xviii. f.

stemmed the invasion of the Galatae. On the rare silver and copper coins on which it is found, the inscription ΣΩΤΗΡΟΣ ΑΝΤΙΟΧΟΥ is invariably associated with a head that wears the stamp of unmistakable individuality, an association that justifies us in immediately setting aside, as also belonging to Antiochus I., a large number of pieces on which the same head appears unaccompanied by the distinctive title. In somewhat similar fashion, at the lower end of the scale, we are in a position to identify Antiochus III. owing to the accident that, during his reign, the coins are occasionally dated; and we are thus enabled to dispose of another considerable group of pieces which, though undated, bear a portrait that approximates more or less closely to the head upon the dated coins. But, when all is done, there still remain many that cannot readily be brought into line with either the one or the other of our fixed types, while there are, even within this remainder, differences so clearly marked as to make it impossible to assign the whole to any one prince. It is generally admitted that the majority of them must belong to Antiochus II. It has long been recognised that some of them were probably struck by Antiochus Hierax in the course of the fratricidal war which, as 'king' of Asia Minor, he waged against Seleucus II. More recently a third possible claimant has come forward in the person of Antiochus, son of Antiochus III., whom we now know to have borne the title βασιλεύς for many years before his untimely death. Lastly, family resemblances are apt to be misleading, and it is always conceivable that, in the absence of certain knowledge as to the actual features of Antiochus II., coins that really belong to him may have come to be attributed either to his father or to his grandson. The phrase 'absence of certain knowledge' may seem unduly suggestive of scepticism. The fact, however, is that, while some well-known groups of coins are assigned to this king by general consent, the reasoning by which the conclusion has been reached is too purely negative to be convincing. No secure basis for iconography has yet been established.³ For the rest, it is literally true to say that every writer who attempts to deal with the subject, produces a new portrait of Hierax,—a rule to which I fear that I am not destined to form any exception.

The set of coins that has been selected for detailed examination now is that consisting of tetradrachms on which the diadem worn by the king is furnished with wings. The choice was determined by obvious considerations. Firstly, it seemed that it would be easy to show that the bulk of these pieces had been issued from the same mint. Secondly, a preliminary survey had disclosed the fact that the portraits upon them varied in a more marked degree than is usually supposed. If, then, it proved possible to arrange the different issues chronologically on numismatic grounds and without any reference to the particular individuals who may have issued them, we should have a basis from which deductions might with some confidence be drawn.

³ See Bunbury's paper *passim*, and also the note by Prof. Gardner in the same volume of the *Num. Chron.* (1883, pp. 261 ff.).

The method here outlined is not a new one. A classic example of its use is Imhoof-Blumer's admirable monograph on the money of the Pergamene Kings.⁴ But, so far as I am aware, its application has not yet been extended to the coinage of the Seleucidae.

The first step necessary was the accumulation of sufficient material. It is a pleasure to acknowledge the readiness with which the owners or the custodians of the collections concerned responded to requests for casts. Thanks to their assistance, as well as to that of those who made vain search in other cabinets, the list that follows may be regarded as fairly complete. It includes all published examples, so far as their present whereabouts could be traced, and also several that are now described for the first time. In two instances (Nos. 27 and 34) photographic reproductions only were available. In all other cases either the originals or good plaster casts have been at my disposal for study. Roman numerals are employed to indicate the chronological divisions into which the series falls, parallel groups being distinguished by the addition of letters of the alphabet. For convenience of reference, Arabic numerals have been added, running consecutively from beginning to end. The relative order as given by these last is, however, of small importance. Within the main divisions the arrangement cannot be more than roughly approximate. Where different specimens are enumerated under the same number, it is to be understood that they are from the same dies on both sides. Where the mathematical sign of equality is employed, it means not merely that the two specimens thus connected are from the same dies, but that they are identical. All the coins included in the list are tetradrachms of ordinary Euboic-Attic weight.

LIST OF COINS.



I. A.

- | | |
|--|--|
| 1. Head of youth r., wearing winged diadem; nose slightly aquiline; cheek and chin round and full; border of dots. | ΒΑΣΙΛΕΩΣ Apollo, naked but for
ANT IOXOY drapery over r. thigh,
seated l. on omphalos; he looks
along an arrow held, point down-
wards, in r., and leans with l. on
top of bow, which stands on the
ground behind him; in ex., horse
grazing r.; in field l., inside inscr.,
Ε and ΚΑ. |
|--|--|

Pl. I., 7 = Berlin (Imhoof).

⁴ *Die Münzen der Dynastie von Pergamon*. *Wissenschaften*, 1884).
 (Abhandl. der Königl. Preuss. Akademie der

I. B.



2. Elderly male head r., wearing winged diadem; nose long and straight; eye deeply sunk; cheek and neck thin, with traces of lines; border of dots. | **ΒΑΣΙΛΕΩΣ** Similar type; beneath,⁵ **ΑΝΤΙΟΧΟΥ** horse grazing r.; in field l. and r., outside inscr.,  and .

Pl. I., 8 = The Hague = *Num. Chron.* 1898, p. 234, No. 1.

II.



3. Head of youth r., wearing winged diadem; border of dots. | **ΒΑΣΙΛΕΩΣ** Similar type; in front **ΑΝΤΙΟΧΟΥ** of Apollo's r. knee, bee (?) upwards.

Pl. I., 9 = Babelon, *Rois de Syrie*, p. 38, No. 284.⁶

4. Similar head; cheek slightly fuller; border of dots. | **ΒΑΣΙΛΕΩΣ** Similar type; in ex., **ΑΝΤΙΟΧΟΥ** horse grazing l.; in field r., outside inscr., ; in ex., behind horse, .



Pl. I., 10 = The Hague = *Num. Chron.* 1898, p. 234, No. 2.

III.

5. Male head r., wearing winged diadem; adult type; border of dots. | **ΒΑΣΙΛΕΩΣ** Similar type; in ex. **ΑΝΤΙΟΧΟΥ** horse grazing r.; in field l., outside inscr., ; above Apollo's r. arm, .

Pl. I., 11 = Sir H. Weber; H. O. O'Hagan = *Bunbury Sale Catal.* ii. No. 453 = Leake, *Num. Hellen. Suppl.* p. 4.

IV. A.

6. Similar head r.; face older and less full. | **ΒΑΣΙΛΕΩΣ** Similar type; in ex., **ΑΝΤΙΟΧΟΥ** horse grazing l.; in field l. and r., outside inscr.,  (?) and .



Pl. I., 12 = Berlin.

⁵ The use of the word 'beneath' implies that there is no exergual line.

⁶ In the case of specimens in the Bibliothèque Nationale, I give the reference to Babelon only, except for No. 18 which is so seriously misdescribed in Mionnet that it would be difficult to identify it in Babelon's


list. Mionnet gives No. 3 under Antiochus Hierax (v. pp. 21 f.). The other Paris pieces were originally placed by him under Antiochus II. (v. p. 16). But in his *Supplément* (viii. p. 17) he withdraws this attribution, and assigns the whole to Hierax.

7. Similar.

ΒΑΣΙΛΕΩΣ Similar type; in ex.,
ΑΝΤΙΟΧΟΥ horse grazing l.; in
field l., outside inscr.,  and .



Sir H. Weber.

8. *Same die as No. 7.*

ΒΑΣΙΛΕΩΣ Similar type; in ex.,
ΑΝΤΙΟΧΟΥ horse grazing l., the
ground being represented by a
line; in field l. and r., outside
inscr.,  and [?].

Pl. I., 13 = E. J. Sellman = *Montagu Sale Catal.*, i. No. 695⁷; Babelon, *Rois de Syrie*,
p. 29, No. 214.



9. *Same die as No. 7.*

ΒΑΣΙΛΕΩΣ Similar type; in ex.,
ΑΝΤΙΟΧΟΥ horse grazing l.; in
field l. and r., outside inscr.,  (?)
and  (?)

Babelon, *Rois de Syrie*, p. 30, No. 216; A. von Petrowicz.



IV. B.

10. Head of boy r., wearing winged
diadem.

ΒΑΣΙΛΕΩΣ Similar type; in ex.,
ΑΝΤΙΟΧΟΥ horse grazing l., the
ground being represented by a
line; in field l. and r., outside inscr.,
 and  (?)

Pl. II., 1 = Hunter.



11. Similar head.⁸

ΒΑΣΙΛΕΩΣ Similar type; in ex.,
ΑΝΤΙΟΧΟΥ horse grazing r.; in
field l., outside inscr.,  and .

F. McClean = *Carlsruhe Sale Catalogue*, No. 299 (Pl. X. 8).

V. A.

12. Male head r., wearing winged
diadem; adult type; features
resembling Nos. 6 ff., but
slightly idealised.

ΒΑΣΙΛΕΩΣ Similar type; in ex.,
ΑΝΤΙΟΧΟΥ horse grazing l.; in
field r., outside inscr., ; in ex.,
behind horse, .



Pl. II., 2 = The Hague.

⁷ The specimen engraved in Vaillant, *Hist. Regum Syriae*, p. 45, appears (so far as one can judge from the imperfect representation) to belong to this class. But whether it is

identical with this specimen I am unable to say.

⁸ It is with hesitation that I have decided that this is not from the same die as No. 10.

V. B.

13. Head of youth r., wearing winged diadem. | **ΒΑΣΙΛΕΩΣ** Similar type; in ex.,
ΑΝΤΙΟΧΟΥ horse grazing l.; in
 field l., outside inscr., , and,
 inside inscr., .

The Hague



14. *Same die as No. 13.* | **ΒΑΣΙΛΕΩΣ** Similar type; beneath,
ΑΝΤΙΟΧΟΥ horse grazing l.; in
 field l. outside inscr.,  and .

Pl. II., 3 = Rollin et Feuudent.

15. *Same die as No. 13.* | Similar; style almost barbarous.

Pl. II., 4 = The Hague; A. Loebbecke.



VI.

16. Male head r., wearing winged diadem; adult type; features resembling No. 5, but idealised. | **ΒΑΣΙΛΕΩΣ** Similar type; in ex.,
ΑΝΤΙΟΧΟΥ horse grazing r.; in
 field l., inside inscr.,  and .

Pl. II., 5 = Babelon, *Rois de Syrie*, p. 29, No. 212.

17. Similar head. | **ΒΑΣΙΛΕΩΣ** Similar type; in ex.,
ΑΝΤΙΟΧΟΥ horse grazing l.; in
 field l., outside inscr.,  and .

B.M.C. p. 14, No. 5 (*Pl. V. 2*); Berlin; A. Loebbecke.

18. *Same die as No. 17.* | **ΒΑΣΙΛΕΩΣ** Similar type; in ex.,
ΑΝΤΙΟΧΟΥ horse grazing l.; in
 field l., outside inscr., , (?) and
.

Babelon, *Rois de Syrie*, p. 29, No. 215 = Mionnet v. p. 16, No. 147.



19. Similar head. | **ΒΑΣΙΛΕΩΣ** Similar type; in ex.,
ΑΝΤΙΟΧΟΥ horse grazing l.; to l.
 and r. of horse,  and .

Pl. II., 6 = *B.M.C.*, p. 14, No. 7; Berlin.

20. *Same die as No. 19.* | **ΒΑΣΙΛΕΩΣ** Similar.
ΑΝΤΙΟΧΟΥ



J. Ward (*Greek Coins etc.*, No. 778) = *Montagu Sale Catal.* ii, No. 331.

21. *Same die as No. 19.*

ΒΑΣΙΛΕΩΣ Similar type ; beneath,
 ΑΝΤΙΟΧΟΥ horse grazing l. ; to l.
 and r. of horse,  and .



Berlin ; Vienna ; Munich ; A. Loebbecke ; F. McClean = *Tobin Bush Sale Catal.* No. 202
 (from the Huber Collection).

22. *Same die as No. 19.*

ΒΑΣΙΛΕΩΣ Similar type ; beneath,
 ΑΝΤΙΟΧΟΥ horse grazing l. ; to l.
 of horse,  .



Babelon, *Rois de Syrie*, p. 29, No. 213 ; Berlin ; Turin (*Catalogo Generale dei Musei di Antichità*, iii. p. 328, No. 4559).⁹

23. *Same die as No. 19.*

ΒΑΣΙΛΕΩΣ Similar type ; in ex.,
 ΑΝΤΙΟΧΟΥ horse grazing l. ; to l.
 and r. of horse,  and .

Berlin.

24. Similar head.

ΒΑΣΙΛΕΩΣ Similar type ; beneath,
 ΑΝΤΙΟΧΟΥ horse grazing r. ; in
 field l., outside inscr.,  and .



Pl. II., 7 = *B.M.C.* p. 14, No. 6 ; Hunter.

25. *Same die as No. 24.*

Similar.



G. Philipson = *Bunbury Sale Catal.* ii. 452.

26. *Same die as No. 24.*

ΒΑΣΙΛΕΩΣ Similar type ; in ex.,
 ΑΝΤΙΟΧΟΥ horse grazing l. ; be-
 hind horse,  ; in field r., inside
 inscr., .



Berlin.

27. *Same die as No. 24.*

Same die^{9a} *as No. 26 ; with*  *in*
place of .

Bunbury Sale Catal. ii. 451 (Pl. IV.)

28. *Same die as No. 24.*

ΒΑΣΙΛΕΩΣ Similar type ; beneath,
 ΑΝΤΙΟΧΟΥ horse grazing l. ; to l.
 of horse,  .

The Hague.

⁹ This specimen is considerably worn, but I am satisfied as to the identity of the dies.

^{9a} I have not seen the original either of this

or of No. 26, and I am unable to say which represents the first form of the die.

29. *Same die as No. 24.*

Gotha.

ΒΑΣΙΛΕΩΣ Similar type; in ex.,
 ANTI OXOY horse grazing r.; in
 field l., outside inscr., ☒, and, be-
 neath inscr., Κ.

30. *Same die as No. 24.*

ΒΑΣΙΛΕΩΣ Similar type; in ex.,
 ANTI OXOY horse grazing r.; in
 field l., outside inscr., ☒, and be-
 neath inscr., Κ.

Berlin (Imhoof) = *Num. Zeitschr.*, 1895, Pl. II., 17; Babelon, *Rois de Syrie*, p. 29, No. 211.

31. Similar head.

ΒΑΣΙΛΕΩΣ Similar type; in ex.,
 ANTI OXOY horse grazing r.; in
 field l., outside inscr., ☒, and,
 beneath inscr., Κ (?).

Pl. II., 8 = Cambridge = Leake, *Num. Hellen.*, p. 23.

32. Similar head.

[BA]ΣΙΛΕΩΣ Similar type; in ex.,
 horse grazing l.; be-
 fore Apollo's knee, female head l.,
 (helmeted?); in field l., above,
 Π (?).

Pl. II., 9 = The Hague.

33. Similar head.

ΒΑΣΙΛΕΩΣ Similar type; in ex.,
 ANTI OXOY round shield¹⁰ to l. and
 r. of which, ☒ and ☒.

Pl. II., 10 = Berlin (Fox) = Leake, *Num. Hellen. Suppl.*, p. 4.

34. Similar head.

ΒΑΣΙΛΕΩΣ Similar type; in ex.,
 ANTI OXOY round shield, to l. and
 r. of which, ? and ☒.

Catal. Walcher de Mollheim, No. 2892 (Pl. XXIV.)

A technical point demands attention at the outset. In his very careful and interesting paper on *Unpublished Coins of the Kings of Syria*, Sir E. H. Bunbury incidentally remarks that 'we have many instances of the combination of the same die on the reverse with different obverses and *vice versâ*.'¹¹ As applied to the class of coins of which Bunbury was writing, the statement requires modification. The list given above does not contain a single

¹⁰ Leake (*l. c.*) describes this symbol as "Boeotian shield in wreath." Dr. von Fritze, who has been good enough to examine the original for me, writes that what appear on the

electrotype to be the ends of a wreath, seem to be merely marks due to oxidation.

¹¹ *Num. Chron.* 1883, p. 77.

example of a reverse die combined with more than one obverse. The '*vice versa*,' on the other hand, is abundantly illustrated. A precisely similar result emerges from Mr. Hill's analysis of the dies of a particular set of the coins of Nagidus.¹² Other districts present contrary instances, so that no general law can be laid down. At the same time, it is plain that, at certain periods and in certain places of mintage, the life of an obverse die was much longer than the life of a reverse. How is this to be accounted for? No doubt, it is not unconnected with the fact that, in the cases under consideration, the reverses have magistrates' signatures. A change of magistrate would thus entail a change of die. But there must be some further reason. For we have examples of reverse dies which, though not identical, are yet similar in all essential points (Nos. 14 and 15; 17 and 18; 19 and 20; 29, 30, and 31), showing clearly that one and the same die did not always suffice for the whole of a magistrate's term of office. On the other hand, in Nos. 26 and 27, we have an instance of a magistrate taking over a reverse die from his predecessor and making it serviceable by altering the monogram. The ultimate explanation is a mechanical one. The obverse die, which rested on the anvil, would necessarily be the more firmly bedded of the two. Its fellow, which received the direct blow of the hammer, would be more liable to breakage. It is significant that all five coins enumerated under No. 21 are slightly disfigured by traces of a crack in the die of the reverse.

The comparatively short life of the reverse die entailed a curious consequence. If it was not destined to last long, there was no special inducement to take trouble about it. Hence it often bears marks of careless execution. In particular, the horse in the exergue is sometimes barely recognisable. Dr. Imhoof-Blumer has drawn attention to similar carelessness on the reverses of the Pergamene regal coins,¹³ and Mr. Warwick Wroth informs me that it is common throughout the Parthian series. Ordinary carelessness, however, will hardly account for what we find in No. 14 as compared with No. 15 (PLATE II., 3 and 4). There an obverse die is associated first with a normal reverse, and then with one on which the figure of Apollo betrays a rudeness that is almost barbarous, the magistrates' signatures being in both cases the same. It is not difficult to suppose that the minting apparatus may sometimes have formed part of the train of a campaigning army. If, under such circumstances, a reverse die met with one of the accidents to which we have seen that reverse dies were peculiarly subject, there may not always have been at hand a skilled engraver ready to make good the defect.

Passing from this preliminary consideration, we must deal first with a question that is fundamental. Unless it can be proved that the coins on our

¹² *B.M.C. Lycaonia*, etc., pp. xlv. f., footnote.

¹³ *Die Münzen der Dyn. von Pergamon*, p. 20. The explanation there suggested is

that engravers of inferior skill were employed to cut the reverse dies. This, of course, is in no way inconsistent with the view put forward above.

list have a common origin, all attempts to justify a chronological arrangement will be futile. The differences underlying our arrangement are small, and, even though it be taken for granted that they followed one another in the same order of succession everywhere, it would not be fair to assume that the development was simultaneous at all the mints throughout the Seleucid Empire. Fortunately the matter is not one that gives room for difference of opinion. The pieces under discussion are generally attributed to Alexandria Troas, and, so far as the great majority of them are concerned, the correctness of the attribution is beyond dispute. All but three (Nos. 3, 33, and 34) have a grazing horse in the exergue on the reverse. That the horse is in no way connected with the figure of Apollo is proved by its occurrence, in the same position and in an exactly similar attitude, beneath the seated figure of Zeus on tetradrachms of the Alexander class.^{13a} As it is not connected with the type, it must be a symbol in the proper sense of the term. Normally, a symbol is either a mint-mark or the crest of a magistrate. In this case it cannot be the crest of a magistrate, inasmuch as it is found along with various combinations of the monograms which so obviously represent magistrates' names. It must, therefore, be a mint-mark, and, as it is a reproduction in miniature of the most characteristic coin-type of Alexandria Troas, the conclusion is irresistible. Incidentally we can glean a little information as to the arrangements for supervising the issue of money at this particular city. Two monograms appear on each coin. In spite of the variety with which these monograms are combined, their total number is limited. It is clear that the magistracies attached to the mint were held in succession by members of the same family or families, a practice that we know to have been followed in other parts of the Hellenic world. Further, of the two magistrates who sign on each tetradrachm, one held office for a longer period, the other for a shorter. Thus, for example, on Nos. 24 ff. we have the same obverse die associated with seven different reverses. On all seven reverses the monogram \mathbf{K} or $\mathbf{\Delta}$ is found, and it occurs in combination with at least three other monograms, no one of which can possibly conceal the same name as either of its companions. The inference is plain. The more important magistrate's term of office was at least three times as long as that of his colleague. Not improbably it was a good deal longer.

Hitherto we have been dealing only with the reverse side of the coins. The evidence as to community of origin is confirmed in an unusually interesting way by the obverse. In all previous discussions of these pieces it has been assumed that the significance of the wings on the king's diadem was personal. The explanation most generally adopted is that put forward by Babelon, who regards the device as having been originally adopted by Antiochus II. in order to bring into prominence his descent through his mother Stratonice, daughter of Demetrius Poliorcetes, from the royal house of Antigonus, and therefore ultimately from Perseus.¹⁴ This view I find myself

^{13a} Müller, *Numismatique d'Alexandre le Grand*, Nos. 923 f.

¹⁴ Babelon, *Rois de Syrie*, etc., pp. lv. f.

unable to accept. The wings are primarily a local mark, not a personal one. In other words, in Alexandria Troas and its neighbourhood the cult of the Seleucid monarchs was assimilated to the worship of some god or hero who was conventionally represented as wearing wings upon his head. The discovery of an inscribed stone may one day tell us who the god or hero was. When we have learned that, we shall be in a better position to speculate on the grounds that underlay the assimilation.

This opinion as to the meaning of the wings was formed some time ago. It was strikingly confirmed when I lighted, in the trays of the British Museum, on the coin which is there classed as No. 10 of Antiochus III. Since this paper was begun, the piece I speak of has been published by Dr. von Fritze in Dörpfeld's *Troja und Ilion*,¹⁵ where attention is drawn to a point that provides conclusive proof of the correctness of the contention advanced above. That readers may judge for themselves, the tetradrachm just mentioned is here reproduced (PLATE I., 6). Side by side with it stands the earliest example of the winged diadem group (PLATE I., 7). A comparison of the reverses shows a general similarity of type and inscription. The noteworthy point is that the symbol is different. Instead of a grazing horse in the exergue, we have in the field I. the statue of Athena Ilias, the familiar coin-type of Ilium, which must therefore have been the issuing mint. Turning to the other side, that with the head of the monarch, even the casual observer could not fail to notice the extraordinary resemblance between the two coins. Dr. von Fritze points out that both are actually *from the same die*, the wing which appears on the coin of Alexandria, having been added in the interval between the two striking.¹⁶ I am able to say that Mr. Head and his colleagues in the British Museum concur unreservedly. At Ilium, therefore, wings were inappropriate. At Alexandria Troas they were felt to be essential. As the two towns were not very far apart, we may perhaps infer that the cult to which the wings bear witness, prevailed only within a limited area. It was not, however, restricted to Alexandria Troas itself. There are other marks to be accounted for. Thus on No. 3 (PLATE I., 9) we have a bee (?). This may be the crest of Gentinus, a town of which we know nothing except that it was in the Troad, and that it was reputed to have been founded by one of the children of Aeneas.¹⁷ In the fourth century B.C. it struck bronze coins with a bee as the reverse type.¹⁸ If the wings could be taken as furnishing any clue to the site, this should be looked for in the near neighbourhood of Alexandria Troas. Such a situation would account for the early cessation of the autonomous coinage. The city would be reduced to insignificance by the new creation of Antigonus and Lysimachus (310-300 B.C.). Again, on Nos. 33 and 34

¹⁵ P. 480. No. 14 (Beilage 61, 14).

¹⁶ *Op. cit.* p. 504. Dr. von Fritze regards the wing as having been present on the die in its original form and as having been afterwards erased. Mr. Head was at first inclined to take this view, but he now agrees with me that the

wing represents the second stage. For the purposes of our argument it is quite immaterial whether it is an addition or an erasure that we have to do with.

¹⁷ Steph. Byz. *s.v.*

¹⁸ *B.M.C. Troas*, etc., Pl. x. Nos. 9 ff.




(PLATE II., 10), the place of the grazing horse is occupied by a round shield. I cannot recall any city in the Troad for which this would be a likely mint-mark. It may be the badge of some small town that has left no independent numismatic memorials. The monograms, it should be added, differ entirely from any found on the tetradrachms of Alexandria. There is still another coin on our list that calls for special notice. No. 32 (PLATE II., 9) appears to be an alliance coin. In addition to the grazing horse in the exergue, there is a second symbol in the field 1., probably a head of Athena, although the worn condition of the coin renders certainty impossible. There are so many cities that might have used this as a mint-mark that it is not worth while attempting to choose between them.

Community of origin being thus, I hope, satisfactorily established we may now proceed to examine the proposed chronological arrangement. The period within which the whole series must necessarily fall is, as we shall see, but a brief one at the best, and the task of determining the relative ages of the individual pieces is correspondingly difficult. The reverse type remains unchanged throughout, and we are thrown back on various considerations of a more or less delicate character. Some are purely technical, such as the presence or absence of the border of dots, the height of the relief, the breadth of the *flan* or blank on which the coin is struck. Others are iconographic or epigraphic. But, whatever their nature, no one of them is so strong that, taken by itself, it would carry conviction. It is on the combination of testimony that we must rely. Hence a detailed discussion of the different classes becomes imperative. It shall be as concise as is consistent with clearness.

Class I. consists of two coins. The first of these is distinguished from all that follow by the high relief in which the obverse type is represented (PLATE I., 7). This at once suggests that it is relatively early, a view that is supported by the border of dots which encloses the head. For comparison with the issues of the Bithynian and Pergamene kings shows that we may safely regard the border as an index of chronology; in these series it is found only on the money of the earlier kings. The piece that stands second on our list (PLATE I., 8) is unfortunately in poor condition. Not only is the surface worn, but the appearance of the dots that form the border, proves that the obverse has not been 'cleanly' struck to begin with. But, disfigured as it is, the border resembles the border of No. 1 more closely than that of any of the three coins placed next in order. That the magistrate E signs on both No. 1 and No. 2 may be no more than a coincidence. But it is worth noting that he (ona namesake) signs again on No. 4, and that afterwards we do not find any monogram resembling his until we reach P in Class VI. Finally, our grouping is confirmed by the portraits. While the two are utterly unlike one another, they have this feature in common, that neither shows any affinity to anything else in our series. If we attempted to make room for them at any point, we should interrupt what I trust may prove to be a continuous line of iconographic development.

The two coins that compose Class II. are connected by the closest of all bonds. Both appear to reproduce the portrait of the same individual at about the same period of his life. The face on No. 4 (PLATE I., 10) is a little fuller than that on No. 3 (PLATE I., 9). Perhaps it is slightly older. It should, however, be remembered that the two were struck at different mints. The absence of monograms, no less than the change in the symbol, points to some other town than Alexandria as being responsible for No. 3. The slightly different treatment of the wing is also worth noting. But the mints, though different, are not likely to have been far apart. As we have seen, they were in all probability nearer than Ilium and Alexandria. Consequently we are fairly entitled to appeal, for confirmation of our classification, to the general similarity of style and especially to the presence of the border. The dots, it may be observed, are rather larger and rather more widely separated than was the case in the preceding Class.

Class III. can be readily disposed of. It contains only a single coin (PLATE I., 11). The border of dots, which still lingers, though in a slightly changed form, gives it priority over all that come after it in our list. At the same time, the portrait seems to present us with the fully matured head of the youth whose coins we placed in Class II. The most prominent features are the long nose and the pointed chin, the latter now exhibiting a decided tendency to become double.

Class IV. contains two parallel subdivisions, each represented by two different obverse dies. Beginning with IV. A, we shall hardly require to defend the collocation of No. 6 (PLATE I., 12) and Nos. 7 ff. (PLATE I., 13). A reference to the Plate will show not merely a general similarity of style, but a close resemblance in points of detail. The ends of the diadem, for example, are treated in the same way on both obverse dies; so too is the hair, more especially the locks that cluster over the forehead; there is no border. The portrait can, I think, be connected with Classes II. and III. The face, no doubt, is represented as thinned by age; but the nose is unchanged, and the chin, if it is no longer double, is still brought forward to a point. Turning next to IV. B, the two obverses in which are almost exactly alike, we find that the portrait is in striking contrast to the head we have seen on the coins of IV. A. We are now in the presence not of a middle-aged or an elderly man, but of a mere boy (PLATE II., 1). And yet technical and stylistic considerations force us to conclude that the coins are contemporaneous. Thus, the diadem is handled in the same fashion in both sets. Again, alike on No. 8 (where we have the elderly head) and on No. 10 (where we have the boy), the grazing horse of the reverse stands upon a line which represents the ground—a refinement that occurs on no other die throughout the whole list. Further, all the reverses, whether of IV. A or of IV. B, are flat, no concavity to speak of being apparent. In view of what we have learned as to the family character of the magistracy of the mint, too much importance is not to be attached to the monograms. But it should at least be mentioned that each of the six reverse dies involved bears one or other of three forms of the same name, , , or . I have reserved to the last

the most convincing proof of homogeneity. Numismatists are familiar with the phenomenon of the bevelled edge, which occasionally makes its appearance in certain series. The tetradrachms of some of the Bithynian kings provide a conspicuous example. Mr. Hill has pointed out to me that this bevelling must be a direct result of the shape of the mould in which the *flan* or blank was originally cast: it is clear that the bevelled portion has remained untouched by the die, because type and legend invariably disappear when it is reached. What the ultimate motive may have been it is impossible to say. The important point to notice now is that, on the winged diadem coins, the phenomenon is characteristic of Class IV. and of Class IV. alone.¹⁹ To this is due the large proportion of incomplete and doubtful monograms it contains. No trace of a bevel is visible on the casts of No. 6 or of the Paris specimen of No. 8. But on all the other six coins in the Class it is quite unmistakable both on obverse and on reverse. And I think the exceptions are only apparent. In both cases the originals are somewhat worn, but the flat reverses and the doubtful monograms point to the same form of *flan*. The whole Class appears to have been struck at a time when a peculiar variety of casting mould was in use at Alexandria Troas.

Throughout Class IV the coins tend to assume the thin, spread shape that we are accustomed to associate with the later tetradrachms of Asia Minor. The greatest diameter of No. 7 for instance, is as much as 1·4 inches. In Class V the tendency becomes strongly marked, and is accompanied by a decided increase in the concavity of the reverse. The similarity of fabric is useful as confirmatory evidence, but the real motive for the grouping adopted lies in the portraits. On Nos. 13 and 14 (PLATE II., 3 and 4) we can recognise, in spite of the inferior execution, the boy whom we have already met with on No. 10 (Plate II., 1). Though the face is somewhat older, it is still that of a lad in his teens. On No. 12 (PLATE II., 2), on the other hand, we may trace through a thin veil of idealisation the features that figured on Nos. 7 ff. (PLATE I., 13). The gods have given back youth to the middle-aged man of the earlier coins, just as at a later period they gave it back to Antiochus Epiphanes.²⁰

In Class VI the same process of idealising is carried a stage further. The double chin, so distinctly marked on some of the examples (*e.g.* PLATE II., 5), shows that it is the head of Class-III., rather than that of Class IV. A, that has been taken as a model. The illustrations on PLATE II. are fully representative, and remove all need for hesitation about assigning the coins they depict to one and the same period; the strong resemblance between the portraits renders doubt impossible. In fabric the pieces that compose Class VI. exhibit a slight reaction from those that preceded them

¹⁹ A very slight tendency towards the same thing is noticeable in the Tobiu Bush specimen of No. 21, which has also a flat reverse. Elsewhere I can detect no trace of anything of the sort. Some of the obverses in Class VI., *e.g.* Nos. 26, 27, and 28, fall away suddenly at the

edge round a considerable part of the circumference. But the appearance presented is quite different from the regular bevel of Class IV.

²⁰ Compare, for example, in *B.M.C. Seleucid Kings*, Pl. xi, the head on No. 7 with that on No. 1,

Indeed, the diminution in the spread of the *flan* might have tempted us to alter the sequence, were it not for two weighty considerations. The first has been already alluded to,—the more decided fashion in which the idealising of the portrait-head has been carried out. The second is of a different character, but is at least equally important. The technique of the legends indicates that the place of Class VI. is at the end of the series. Thus there are signs of the disappearance of firmness of line on one or two dies notably on No. 17 (*B.M.C. Seleucid Kings*, Pl. v. 2), where the letters show a tendency to terminate in dots. Most significant, however, is the substitution of ω for Ω on No. 30 and on No. 31 (PLATE II., 8). This is a matter to which we shall have occasion to return.

Still confining ourselves strictly to the evidence furnished by the coins themselves, we have now to ask how long a period may be supposed to have elapsed between the issue of No. 1 and the issue of No. 34. The changes in style and fabric have been considerable. We have seen the dotted border pass through one or two different phases, and then disappear. We have seen the *flan* broaden out, and then contract. We have encountered a short space during which the fashion of the bevelled edge prevailed. Lastly, the difference between the obverse of No. 1 and the obverses of, say, Nos. 32 and 33 (PLATE II., 9 and 10) is so well defined as to be explicable only on the supposition that there is a fairly long interval between them. The same conclusion follows from a comparison of the portraits. First come two that stand by themselves and apart. Next we find a lad who grows to manhood, reaches middle-age, then renews his youth and shines with a preternatural beauty that points to deification. At his side, and just at the moment when the relative ages suggest the connection of father and son, we catch a passing glimpse of the figure of a boy. I do not think any numismatist will regard as other than modest the proposal that we should allow about fifty years for this process of transformation,—technical, stylistic, iconographic.

If we have succeeded, as I trust we may have done, in laying a secure chronological foundation, we are at liberty to turn to the literary records and enquire how far these and the numismatic memorials can be brought into correspondence. And, first, how does the literary evidence bear on our assumption that at intervals during a period of fifty years coins with the image and superscription of a 'king' Antiochus were struck at Alexandria Troas? The first monarch of the name succeeded to the throne in 281 B.C. At least as early as 289, and possibly even in 293, he had received from his father a share in the empire along with the title of βασιλεύς.²¹ Till the death of Seleucus, however, the direct authority of Antiochus appears to have been limited to the Eastern provinces. It was only beyond the Euphrates that his writ would run. All the coins that can safely be attri-

²¹ Cf. Plutarch, *Demetrius*, 33 *ad fin.*, and Appian, *Syr.* 59-61, with the data furnished by the cuneiform inscriptions of Babylon. See Wilcken in Pauly-Wissowa's *Real-Encyclopädie*,

i. 2450. I take this opportunity of acknowledging once for all my obligations to Wilcken's admirable articles on the early Antiochi.

buted to the period of joint rule are of oriental origin. Hence the possible *terminus a quo* for Alexandria Troas must be fixed at 281 B.C. When Antiochus I. fell in battle after a reign of twenty years, he was directly followed by a son who was called by the same name as himself. Antiochus II. died in 246 B.C. His legitimate successor was his eldest son, Seleucus II., and here it would seem for a moment as if our chain were broken. History, however, tells also of a younger son, Antiochus, surnamed Hierax, a mere boy, who, with the support of influential partisans, declined to accept the authority of his brother and claimed to be recognised as sovereign of Asia Minor, a recognition that was actually extended to him by Seleucus when he found his own position seriously menaced by the pressure of a war with Egypt. Once that pressure was removed, hostilities broke out between the two brothers. The struggle continued during the greater part of the reign of Seleucus. It cannot be said to have ended until 227 B.C. when its last embers were extinguished in the blood of Hierax. But, for all practical purposes, it was really over two years earlier when the pretender was expelled from the territories that had from the outset been his stronghold. These territories were in the extreme west of Asia Minor. Of their extent the coins may have something to tell us. The important point for our present purpose is that the year thus reached, 229 B.C., is the latest *terminus ad quem* that is historically possible. The evidence for this demands closer examination.

Our knowledge of the story of Hierax is fragmentary and confused. But one fact looms through the mists of obscurity in which the drama is shrouded. In its closing scenes a prominent part was played by Attalus of Pergamum who allied himself with Seleucus. There is every reason to suppose that his services were rewarded by the acknowledgement of his sovereignty over some of the districts where Hierax had held sway. It is, at all events, certain that Alexandria Troas had passed under his influence before the accession of Antiochus III. in 222 B.C. That this was so we learn from a chance reference in Polybius. Seleucus II. did not long survive Hierax. His son and successor, Seleucus III., was assassinated at the outset of a campaign the object of which was to recover from Attalus the hereditary domains of the Selucid kings on the shores of the Aegean. Antiochus III., who followed Seleucus III., entrusted to his cousin Achaeus the conduct of the enterprise on the threshold of which his brother had fallen. Achaeus was so successful that he assumed the title of βασιλεύς and turned his arms against his master. Antiochus thereupon joined hands with Attalus, and between them the usurper was crushed. Now, in his narrative of the events thus summarized, Polybius (v. 78) expressly mentions three cities which had never swerved in their loyalty to the *Pergamene* King. These three were Lampsacus, Alexandria Troas, and Ilium,—lying all of them in the very region to which the coins will be found to point as the centre of the power of Hierax. As to what happened after the death of Achaeus, there is no clear evidence. All the probabilities, however, are in favour of concluding that Antiochus agreed to admit the claims of his new ally, and that the Troad

accordingly remained attached to the kingdom of Pergamum until the death of Attalus in 197 B.C., when for a few brief years the Seleucid power was again paramount in western Asia Minor.

This sketch will have made it plain that there were two periods during which the sovereignty of princes named Antiochus might have been acknowledged in Alexandria Troas—the half-century that elapsed from the accession of Antiochus I. to the expulsion of Hierax, and the few years that immediately preceded the battle of Magnesia.^{21a} We cannot hesitate between these in choosing a framework for our coins. The first is of precisely the right length, while at the same time it may be expected to supply a sufficient number of historical personages to enable us to account for the variety of heads that appear. As the middle part of it coincides with the reign of Antiochus II. it is practically certain that we shall find that monarch figuring in our picture gallery. It therefore becomes important to try and discover some 'standard portrait' of him by which our impressions may be tested. The task is not so hopeless as it might seem. In his *Seleucid Kings* Professor Gardner ascribed to Hierax a gold stater of the ordinary Seleucid type which had been acquired by the British Museum after the main part of his catalogue had been printed.²² Four other pieces, more or less similar, now lie beside it in the trays, which also contain no fewer than nine gold staters of Antiochus I., as against one which appears in Prof. Gardner's Appendix.²³ Of these fourteen coins, thirteen are known to have been brought at different times from Northern India or Afghanistan. That the fourteenth came from the same quarter is rendered highly probable by the fact that it was presented along with several Indian coins.²⁴ In 1881, when the *provenance* of these staters became apparent, Prof. Gardner saw that it was impossible to believe that they had been struck by Hierax, whose authority never extended beyond Asia Minor. He therefore withdrew his original attribution, and proposed instead to assign them to Antiochus III.²⁵ In this he has been followed by M. Babelon.²⁶ I think it can be shown that they belong to Antiochus II. One of them is here reproduced (PLATE I., 3), and along with it one of the corresponding gold pieces of Antiochus I. (PLATE I., 2). There is, at the outset, a serious iconographic difficulty in the way of the attribution to Antiochus III. The head is quite youthful, while Antiochus was more than thirty years of age when he reconquered the far Eastern provinces that had been lost in the reign of his grandfather. But the main objection rests on the surer ground of style and fabric. A careful examination of the fourteen specimens in the British Museum has convinced me that

^{21a} Alexandria Troas was, of course, one of the three cities whose resistance to the claims of Antiochus directly occasioned the intervention of Rome (Livy, xxxv. 42). That it ultimately fell into his power, seems probable (see Drakenborch's note on Livy xxxvii. 35, § 2).

²² *Op. cit.* p. 110, 1; Pl. xxviii. 1b.

²³ *Op. cit.* p. 108, 1; Pl. xxviii. 1a.

²⁴ It is worth adding that there is a specimen of each class of stater in the Bodleian Collection, the *provenance* being similar to that of the B.M. coins. In his arrangement, Prof. Oman has (rightly as we shall see) assigned the 'Hierax' head to Antiochus II.

²⁵ *Nun. Chron.* 1881, p. 11.

²⁶ *Rois de Syrie*, etc., p. lxxx.

they are all the product of one mint and that they all belong to practically the same period, that is, to the last years of Antiochus I. and the early years of Antiochus II. before the revolts of Parthia and Bactria. Feeling that my personal opinion on such a nice question could carry little weight, I put the point before Mr. Head. After an examination of the pieces concerned, he permits me to say that he has no hesitation in coming to the conclusion that the whole were struck at one mint, and that the earliest and the latest cannot be separated by a longer interval than five-and-twenty years at the outside. His judgment, he adds, has been formed solely on numismatic grounds and without any reference to the portraits. This authoritative opinion makes Antiochus III. as impossible as Hierax, and fully entitles us to claim PLATE I., 3 as a *certain* portrait of Antiochus II.

The evidence of the gold coins can be supplemented in a way that will enable us to restore to their rightful owner a good many silver coins that have long been mis-attributed. On PLATE I., 5 will be found a characteristic specimen of a head that is usually described either as Hierax or as Antiochus III. The original is in the Hunter Cabinet. Alongside of it is placed (PLATE I., 4) a reproduction of a British Museum coin,²⁷ which bears a striking portrait of Antiochus I. The close resemblance between the reverses is very remarkable. The monograms in the exergue are the same. On both coins the figure of Apollo is represented as wearing *boots*, a peculiarity I do not remember to have noticed anywhere except on these and one or two similar pieces. Here again I appealed to Mr. Head, and here again I am allowed to say that he confirms the opinion I had been led to form: the case is precisely parallel to that of the gold staters. We have thus provided ourselves with two portraits of Antiochus II., which we may safely use as aids in attempting to identify the winged heads. But a word of caution is required. The gold coins came, as we have seen, from the extreme East. I have no evidence as to the *provenance* of the silver pieces. Their fabric, however, is not that of Asia Minor. In comparing our portraits with those engraved at Alexandria Troas, we must, therefore, bear in mind the wide distance that separated the places of issue, and must refrain from insisting on too close a resemblance.²⁸

If we apply our test pieces to Class I., we shall, I think, be compelled to admit that Antiochus II. is impossible alike for No. 1 and for No. 2. Whom then are we to suppose that they represent? Worn and disfigured as it is, No. 2 (PLATE I., 8) can be disposed of more readily than its companion. There need not be much hesitation in recognising on it the features of Antiochus I. Iconographically, no other solution seems open to us.

²⁷ Gardner, *Seleucid Kings*, p. 9, No. 19.

²⁸ Differences of this sort between the products of different mints are familiar to numismatists. It could not have been otherwise, especially if a reign were long. Even coins struck at the same mint sometimes present extraordinary contrasts; see, for example, the

two heads of Nero reproduced in *B.M.C., Galatia*, etc., Pl. xxi. Nos. 8 and 9. Some interesting remarks by Botho Graef on the limitations of the die-cutters will be found in *Jahrbuch des Kaiserl. deutsch. archæol. Instituts*, xvii. p. 72.

Historically, the identification is not only possible but probable. The relations that subsisted between this monarch and the cities of the Troad were exceptionally cordial, as we learn from the so-called 'Sigeian' inscription, now in the Library of Trinity College, Cambridge.²⁹ There remains the head on No. 1. This appears to be quite unlike any portrait to be met with elsewhere throughout the Selencid series. It bears even less resemblance to Antiochus I. or to Antiochus III. than it does to Antiochus II. Dr. von Fritze, feeling the difficulty, has assigned it to Antiochus Hierax.³⁰ Such an attribution, however, if accepted, would involve the immediate abandonment of the chronological arrangement which we have been at such pains to build up. Besides, as we shall see, Hierax is otherwise provided for. A possible way out of the dilemma is to suggest that the head may be that of a little known member of the royal house, Seleucus, the elder son of Antiochus I. Of this prince historians tell us hardly anything save that he was put to death by his father on suspicion of treachery.³¹ It is possible that he is mentioned as βασιλεύς, along with his father, on another inscription from the Troad.³² At all events, it is certain—the cuneiform records of Babylon prove it—that he enjoyed the dignity and title at least from 275 to 269 B.C.³³ In 266 his place beside his father on the Babylonian inscriptions is taken by his younger brother Antiochus. The time of his death can, therefore, be fixed within very narrow limits, and this in turn helps us to date our coin, provided our conjecture as to the identity of the portrait be regarded as worthy of acceptance. Let us look at it more closely.

There is no *prima facie* reason against it. Enjoying the position he did, the ill-fated prince might well have left some mark upon the currency; his father had struck coins as βασιλεύς while Seleucus Nikator was still alive. But an obvious objection suggests itself at once. Would it not be strange to find a coin with the portrait of a Seleucus on the one side and the name of an Antiochus on the other? An answer can best be given through the unpublished tetradrachm from the Hunter Collection which is reproduced on PLATE I, 1. On the obverse is a singularly fine portrait of Seleucus Nikator; on the reverse is the head of a horned horse with the legend ΒΑΣΙΛΕΩΣ ΑΝΤΙΟΧΟΥ.³⁴ True, the parallel is not perfect; the positions of father and son are reversed. But this, so far from being a difficulty, is just what we might look for in the circumstances. The Hunter tetradrachm is one of a group of pieces struck, during the period of the joint reign, for circulation in the Eastern provinces where Antiochus held special authority as viceroy. It is, therefore, only natural that it should bear his name. On the

²⁹ Hicks¹, No. 165 (pp. 279 ff.) = Dittenberger¹, No. 156 (pp. 238 ff.).

³⁰ *Troja und Ilion*, pp. 503 f.

³¹ Johan. Ant. (*Fragm. Hist. Græc.* iv. 558, 55).

³² Dittenberger¹, No. 157, l. 11 (p. 242). This is Wilcken's view (Pauly-Wissowa, i. 2454). Dittenberger (*l.c.*) considers that the

reference is to Seleucus Nikator.

³³ *Zeitschr. für Assyriol.* vii. 234, 226, viii. 108. *Keilschr. Biblioth.* iii. 2, 136.

³⁴ The corresponding drachm will be found described in Imhoof-Blumer, *Monn. græc.* p. 424, No. 16, the monograms being different.

other hand, there is no reason to suppose that the young Seleucus ever exercised any special jurisdiction in the Troad. Regal coins issued at Ilium and Alexandria would thus, as a matter of course, be minted in the name of his father. If the portrait be that of the son, it must have been placed upon the coin because some particular occasion for doing honour to the lad had arisen, such an occasion as would be afforded, for instance, by his original elevation to the dignity of βασιλεύς. That there would be nothing very unusual in a proceeding of the kind, we may perhaps learn from the tetradrachms that form Class II.

Babelon and Six have followed Mionnet in identifying the head which is there represented (PLATE I., 9 and 10) as that of Hierax.³⁵ I believe it to be the head of Antiochus II. On various grounds we were led to place it very early in our series. If we assign it to Hierax, we must attribute to him all the coins that follow, variety of portraiture notwithstanding. Further, if we apply our test pieces, we shall, I think, find a considerable resemblance between, say, PLATE I., 5 and PLATE I., 9. The resemblance is, indeed, striking if we have regard to the wide distance between East and West. It is true that the latter represents a considerably younger face than the former. And this brings us to the immediate point. If the coins in Class II. represent the second Antiochus, they must have been struck during his father's lifetime. For, according to Eusebius (*Chron.* I. 251), he was forty years old when he died in 246 B.C., and he must therefore have been twenty-four when he succeeded Antiochus Soter in 261 B.C. We may note that this latter age accords perfectly with the appearance he presents on the coins struck at the very beginning of his reign (PLATE I., 3 and 5). The head on our Class II., on the other hand, is that of a youth some seven or eight years younger. Here again, then, we have a case where elevation to the dignity of βασιλεύς may have provided the occasion for a special issue. The death of Seleucus and the promotion of Antiochus occurred, as we saw above, between 269 and 266 B.C., that is, after Antiochus was seventeen and before he was twenty. The search for further parallels may justify a brief digression, especially as this will enable us to draw attention to a current attribution that calls for correction.

Numismatists and collectors are familiar with the tetradrachms that have on the obverse a childish head within a fillet border, and on the reverse the ordinary seated Apollo with the legend ΒΑΣΙΛΕΩΣ ΑΝΤΙΟΧΟΥ (PLATE II., 12). Since Droysen's time these have been generally classed as belonging to 'Antiochus, son of Seleucus III.' This classification can no longer be maintained. Wilcken has shown conclusively that 'Antiochus, son of Seleucus III.' is a phantom.³⁶ His existence was inferred by Droysen from an inscription of Seleucia Pieria, which contains a list of Seleucidae to whom divine honours were paid.³⁷ The list includes 'Σελεύκου Σωτήρος καὶ Ἀντιόχου

³⁵ Babelon, *Rois de Syrie*, p. 38, No. 284 ;
Six, *Num. Chron.* 1898, p. 234, No. 2 ;
Mionnet, v. p. 21.

³⁶ Pauly-Wissowa, *Real-Encycl.* I. 2470.
³⁷ *C.I.G.* iii. 4458.

καὶ Ἀντιόχου Μεγάλου.' By way of accounting for the seemingly superfluous βασιλεύς, it was supposed that Seleucus III. had had a young son, called Antiochus, who was proclaimed king on his father's death, but was speedily set aside in favour of his masterful uncle, Antiochus III.³⁸ This theory was received almost without question until lately when the real explanation was furnished by a similar inscription discovered at Magnesia on the Maeander.³⁹ In the corresponding portion of the list the names are given as 'βασιλέως Σελεύκου καὶ βασιλέως Ἀντιόχου καὶ τοῦ υἱοῦ αὐτοῦ βασιλέως Ἀντιόχου.' Without a doubt the reference is the same in both cases, the person meant being Antiochus, eldest son of Antiochus III., whose death in 193 B.C. is recorded by Livy (xxxv. 15), and who, as we know from cuneiform inscriptions,⁴⁰ held rank as βασιλεύς for many years. The fact that he predeceased his father readily accounts for his position in the inscription of Seleucia.

The supposed son of Seleucus III. having disappeared from history, it is natural to ask what is to be done with the money that has so long lain at his credit. Has the prince who ousted him any right to be heard as a claimant? According to Polybius (v. 55) this young Antiochus was born on the eve of his father's expedition against Artabazanes, that is, in the year 220 B.C. He would thus be 27 at the date of his death, so that, if the coins belong to him, they must have been struck a very long time before. That they were all issued about the same period must be obvious to any one who knows them. How would the facts of the case be met by such an hypothesis as that suggested to account for the possible appearance of Seleucus, son of Antiochus I., on coins of Ilium and Alexandria Troas? In 212 B.C. the cuneiform inscriptions mention Antiochus III. as sole king. For four years there is a gap in our documents and then, in 208, we find his son Antiochus associated with him as βασιλεύς. In this latter year the prince would be a boy of twelve, decidedly too old for the almost infantile features that the coins display. Doubtless it might be argued that the title was bestowed upon him somewhat earlier. His father set out on his great expedition to the East not later than 209 B.C. Preparations must have begun long before. A prospective absence of several years from the seat of government would have to be provided for, and it is very probable that the proclamation of the king's eldest son as βασιλεύς was one of the precautions taken. Such a ceremony, we may be sure, would be carried through with all pomp and circumstance. It is tempting to suppose that it included the issue of a series of coins which would carry the likeness of the new regent into the remotest corners of the kingdom, and which would, by a happy accident, be able to carry his name also without his father's rights being in any way infringed. The chief objection to this view, and it is so serious as to be almost a fatal one, is the extremely childish character of the head.⁴¹ On this and other

³⁸ Droysen, *Hellenismus*. iii. 2, 121 ff., 133 ff.

³⁹ Otto Kern, *Die Inschriften von Magnesia am Maeander*, No. 61.

⁴⁰ *Zeitschrift für Assyriologie*. viii. 109.

⁴¹ This is very properly emphasised by Mr. E. R. Bevan in his *House of Seleucus*, which was published while this paper was in progress.

grounds I incline to favour an alternative solution, which will still provide us with the parallel for which we are in search.

The youngest *Βασιλεύς* of the Seleucid line was, so far as our information goes, Antiochus V. (Eupator). According to Appian (*Syr.* 46, 66) he was nine when his father died, that is, in 164 B.C. He must, therefore, have been born in 173. Cuneiform records show that he had received the title of *Βασιλεύς* as early as 170.⁴² Three would suit admirably for the age of the child upon the coins, and all difficulties would vanish if we could suppose that Epiphanes, when he had his son proclaimed joint-ruler, had ordered the issue of a special series of tetradrachms to commemorate the occasion. A systematic and careful examination of all known specimens would probably lead to a definite and certain conclusion. A survey of the material at present at my disposal (London, Paris, Hunter) has shown that there are distinct indications of an affinity between the pieces we are discussing and the earlier coinage of Antiochus Epiphanes.

Returning to the winged diadem series, we find that our task has become comparatively simple. In our discussion of the chronological arrangement, it was pointed out that the youthful head which appears in Class II., is identical with that which is found, at more advanced stages of development, in Classes III., IV. A, V. A, and VI. If then Class II. be attributed to Antiochus II., it is to him also that the great bulk of the remaining pieces in our list must be given. This result tallies with the ordinarily accepted view. But in the application there is an important difference. While the solitary tetradrachm in Class III. may well have been struck during the king's lifetime, the whole of the rest were probably issued after his death. They form, in fact, part of the coinage of Antiochus Hierax and his supporters. The suggestion that this might be so was put forward by the late Dr. J. P. Six,⁴³ who saw in it a possible explanation of the idealisation of the royal portrait, a characteristic first pointed out by Bunbury.⁴⁴ As my own conclusion was reached independently, it will be worth while trying to justify it.

Antiochus II. is known to have treated the Greek cities of Asia Minor with exceptional liberality. Hence, indeed, his title of Theos. This policy was forced upon him by the necessity of securing their support against Ptolemaic aggression. But the lustre that it threw round his memory was none the less bright and abiding. If it still lingered when he had been dead for a century,⁴⁵ it must have been brilliant indeed in the years immediately after he had passed away. In such circumstances we can well imagine that, just as (to take a single instance) the kings of Pergamum for generations

The suggestion there made (vol. ii. p. 125) appears, however, to involve difficulties no less serious. We do not know how old the son of Selenus Philopator was when his father died, we do not know whether his name was Antiochus, and there is no evidence that he was ever proclaimed *Βασιλεύς*.

⁴² *Zeitschr. für Assyriol.* viii. 110.

⁴³ *Num. Chron.* 1898, pp. 234 f. We saw

H.S.—VOL. XXIII.

above that in his *Supplement* Mionnet, following Visconti, assigned all the winged diadem coins to Hierax. But he did so in the belief that the head was the head of Hierax. Dr. Six's view, of course, is quite different.

⁴⁴ *Num. Chron.* 1883, p. 80.

⁴⁵ See E. R. Bevan, *House of Seleucus*, i, p. 176, with references there.

placed upon their coins the divinized head of the founder of their dynasty, so the friends of Hierax—he was too young to act for himself—may have chosen as a type the portrait of the monarch whose position they were anxious that their *protégé* should fill. Can such *a priori* reasoning be supported by any direct evidence drawn from the coins themselves? It may be pointed out, to begin with, that our hypothesis explains in the most natural way possible the appearance of the boyish head in Classes IV. B and V. B, the former of which we saw to be some years earlier than the latter. These, along with IV. A and V. A, were struck soon after the death of Antiochus II., an event which took place when Hierax was a boy of about 8.⁴⁶ Class VI., which supplies both the greatest variety of dies and much the largest number of individual specimens, was minted a good deal later, apparently at some point in the struggle when the fortunes of Hierax were in the ascendant, or at least when he had no lack of bullion at his disposal. From the outset the father's head was used as a type, but that of the son was at first also employed. On the last issues the former alone is found. The portrait on PLATE II., 1, 3, and 4 will then be that of Hierax, and the coins concerned thus acquire a fresh interest. Through them, it may be possible to identify other portraits of him struck at different mints.^{46a} For we are not entitled to assume that Alexandria Troas was the only place where he issued money. Returning now to the points on which our chronological arrangement was based, we may enquire whether any of these can be made to furnish a direct indication of the date of any of our Classes.

That the winged diadem series extends over a considerable period, we have already seen. Further, Class III., which presents on the obverse a fully matured head of Antiochus II. within a border of dots (PLATE I., 11), must be separated by an interval of some years from Class IV. A, where the portrait is markedly older and where the border of dots has disappeared (PLATE I., 13). As Antiochus II. was only forty when he died, these latter coins bring us at least to the very end of his reign; they may well have been struck after his death. The disappearance of the border of dots is entirely in favour of the same period. This is a matter in regard to which mathematical precision is impossible. But it is interesting to see what happened at neighbouring mints. The familiar Seleucid tetradrachms which have the seated Herakles as a reverse type,—a series that would probably repay special study,—are attributed by common consent to Antiochus II. Presumably they were issued during his lifetime; the portrait is usually quite

⁴⁶ According to Justin (27, 2, 7) he was 14 in 238 or 237 B.C. I need hardly point out that the portrait on Plate II. 1 tallies exactly, so far as age is concerned, with the theory that it represents Hierax as he was when his father died.

^{46a} The great majority of the identifications hitherto suggested are demonstrably wrong. We have already seen (p. 108 f.) that two sets of coins often given to Hierax really belong to

Antiochus II. Similarly, the head figured by M. Th. Reinach in *L'Histoire par les Monnaies*, p. 181, is a youthful portrait of Antiochus III. Much is often made of a supposed resemblance to Seleucus II. It seems to be forgotten that family likenesses are at least as apt to run perpendicularly as to run horizontally; if Antiochus Hierax was the brother of Seleucus II., Antiochus II. was his father and Antiochus III. his son.

realistic. They were struck at different cities throughout Ionia and Aeolis.⁴⁷ Now on all of these, so far as my observation goes, the king's portrait is enclosed by a border of dots. Again, in the coinage of the kings of Bithynia, the dotted border is present on the tetradrachms and drachms of Nicomedes I., who died *circa* 250 B.C., but it is absent on those of Prusias I., the next of the line who issued silver money (*circa* 228–180 B.C.). Once more, on the regal series of Pontus, which begins with Mithradates IV. (*circa* 250–190 B.C.) it is not found at all. The whole trend of the evidence would lead us to believe that in the north and west of Asia Minor the border of dots fell out of fashion about the middle of the second century B.C., though hardly during the lifetime of Antiochus II. There is one important exception. According to Dr. Imhoof-Blumer's arrangement, it survived at Pergamum well into the reign of Eumenes II. (197–159 B.C.). Such a survival could be easily accounted for; the type had long been a conventional one, and association with it would tend to prolong the use of the border.⁴⁸ At Alexandria Troas, on the other hand, the adherents of Hierax were making a new departure, and they would be free to dispense with an ornament that was being abandoned elsewhere. From every point of view *circa* 245 B.C. would suit admirably for Class IV.

Class VI. admits, I think, of being dated more precisely. It will be recollected that one of our reasons for placing it last in order of time was the occurrence of ω for Ω on two of the dies. In publishing No. 31, Leake long ago remarked upon it as a very early example of the late form of the omega.⁴⁹ As a matter of fact, ω does not seem to occur in Attic inscriptions before 168 B.C.⁵⁰ It does not become common there until the Christian era. Authorities agree in stating that it originated in Egypt and passed from there to Sicily and to Asia. Reinach gives *circa* 230 B.C. as the date of its first appearance on metal in the land of its origin.⁵¹ If we may take this indication as a guide, we are bound to conclude that our coin-dies cannot possibly have been engraved during the lifetime of Antiochus II. They must be assigned to the last portion of the 'reign' of Hierax, which came to an end, as we saw, in 229 B.C. In this connection it is well to remember that, during at least a part of his career he was on terms of friendly alliance with the Egyptian garrisons in the cities of the coast,⁵² and presumably therefore with the court of Ptolemy.

⁴⁷ Imhoof-Blumer, *Monn. grecq.*, p. 426.

⁴⁸ While this is so, I confess that the one point that has caused me difficulty in Imhoof's arrangement, has always been the extraordinarily small allowance that it makes for the long reign of Attalus I. (241–197 B.C.). With characteristic frankness Dr. Imhoof has himself drawn particular attention to the deficiency (*Die Münzen der Dyn. von Perg.* p. 27).

⁴⁹ *Num. Hellen.* p. 23.

⁵⁰ *C.I.A.* II³, 968. See Larfeld in Iwan-Müller's *Handbuch (Hilfs-disziplinen)* p. 536).

⁵¹ S. Reinach, *Traité de l'épigraph. grecq.* p. 208. Cf. Franz, *Elementa Epigraph.*

Graecae, p. 232. Reinach well points out that cursive forms naturally come into use in metal sooner than in lapidary inscriptions.

⁵² Euseb. *Chron.* I. 251 (*Ptolemaci auxilii fretus proelium felici Marte consecruit*). A few lines earlier Ptolemy is spoken of as if he had been a supporter of Hierax, or at least an opponent of Seleucus II., in the first stages of the civil war. These references will suffice to make good my point without entering on the vexed question discussed by Beloch, *Histor. Zeitschr.* 1888, p. 501, and Wilcken in Pauly-Wissowa's *Real-Encycl.* i, 2459.

One final matter remains to be dealt with—the question of locality. The coin figured on PLATE II., 11 belongs to a group which must also form part of the mintage of Hierax. But for the absence of wings on the diadem, the head is an exact counterpart of that which is found on our Class VI. These pieces are not very common. So far as I have noted, all of them have on the reverse one or more of the following symbols—a long torch, the forepart of Pegasos, an eagle with wings closed,—which we may regard as the mint-marks respectively of Cyzicus, of Lampsacus, and of Abydos. Taken in conjunction with the tetradrachms struck at Alexandria Troas, they give us a fair idea of the ‘sphere of influence’ which Hierax dominated before 229 B.C. The numismatic evidence, however, points clearly to Alexandria as the centre of gravity both at this period and also in 245. How far does that accord with the literary testimony? Modern historians have nothing to tell us of any special bond between Hierax and Alexandria. We read, however, of a certain Alexander, brother of his mother Laodice, who was the chief supporter of the pretender when hostilities broke out with Seleucus II. The sole authority for the existence of this Alexander is the following passage from Eusebius as given in Müller’s *Fragm. Hist. Graec.*: ‘*Verum tamen vivente adhuc Callinico Seleuco, Antiochus, minor natu frater quietis sortisque suae impatiens, adiutorem favitoremque nactus est Alexandrum, qui et urbem Sardes tenebat et Laodices matris suae frater erat.*’⁵³ It is hardly necessary to say that for our knowledge of this portion of Eusebius we are entirely dependent upon an Armenian version. Now, if we turn to the same passage in Schoene’s edition (i. 251), we find the crucial words thus rendered: ‘*Adiutorem enim et suppetias Alexandriae etiam habebat, qui Sardiniorum urbem tenebat, qui et frater matris ejus Laodikae erat.*’ Schoene’s critical note shows that the manuscript evidence is unanimous in favour of the locative (= ‘*haghexandrea*’). The substitution of the personal name (= ‘*haghexandré*’) in Müller’s version is due to an emendation of Aucher, who found the locative unintelligible. I do not propose to put forward any interpretation of the sentence as it stands; it is possible that a personal name may have been omitted either by a scribe or by the Armenian translator, or by Eusebius himself in making his compilation. But, in the light of what the winged diadem coins have taught us as to the importance of Alexandria as a mint of Hierax, it seems clear that scholars should pause before adopting Aucher’s remedy. Unless and until further evidence of his existence is forthcoming, ‘Alexander, brother of Laodice,’ must be banished from the pages of biographical dictionaries and sent to join ‘Antiochus, son of Seleucus III.,’ in the world of shadows.

GEORGE MACDONALD.

⁵³ *Op. cit.* iii, p. 710. Attempts have been made to identify the Alexander who is supposed to be mentioned here, with the Alexander of certain inscriptions (Niese, *Geschichte der*

Griech. und Maked. Staaten, ii. p. 154, note; E. R. Bevan, *House of Seleucus*, i. p. 327). Against such identifications there is nothing to be said, provided his existence can be proved.

TWO HEADS OF APOLLO.

[PLATE III.]

I.—*The Oldfield Head of Apollo.*

THE beautiful marble head of Apollo, which is represented on Pl. III was bequeathed by the late Edmund Oldfield, F.S.A., to the Ashmolean Museum. According to a note sent me by Mrs. Oldfield, it was successively in the Poniatowski and Brett collections. When it was in the former gallery, it was seen by Martin Wagner, and is mentioned by him in the *Kunstblatt* of 1830 (p. 238) as closely similar to the Pourtales head, but differing in the treatment of the hair. See also Julius in *Ann. d. Inst.* 1875, p. 33.

According to the arrangement of Overbeck,¹ this head belongs to the second class of Apollo-heads with the corymbus; a class of which the four principal examples are

(a) The Apollo Belvedere and the Steinhäuser head,

(β) The Pourtales head, and that in the British Museum, bought of Castellani.

The Oldfield head is assigned to class β as closely resembling the Pourtales head (Fig. 1) in most respects.

As however the head has been largely made up and restored in Italian workshops, it is necessary to begin by an inquiry how much of it is genuine. This inquiry is difficult because the whole has been cleverly pieced together and worked over. The simplest way of indicating the restorations, is by an engraving in which the restored parts are shaded (Fig. 2). It will be observed that not only the neck but all below the upper lip is modern, also part of the forehead, much of the hair, and notably the corymbus over the forehead as well as the end of the nose. The greater part of the face is genuine, as well as parts of the hair, especially above the left temple, and the bunch at the back of the head. It is sad to give up so much of the head; but at least enough remains to assure us of the forms of the face and the treatment of the hair. The sculptor who did the restoration copied the

¹ *Kunstmythologie: Apollon*, p. 141.

Pourtales head, but in place of a faithful imitation he has attempted a more detailed and elegant replica, not always successfully. The top-knot or crobylus imitates the Pourtales crobylus in its general masses, but goes much more into detail, with a good deal of undercutting. But the parts of the hair which are genuine, especially that over the left temple, are worked in quite another fashion, more simply and flatly, and without any elaborate attempt at elegance. The head in its original condition must have com-



FIG. 1.—THE POURTALES HEAD OF APOLLO

pared with the Pourtales head, much as the Florentine daughters of Niobe compare with the Chiaramonti daughter.

So far as the face of the Oldfield head is antique it closely resembles the Pourtales face, but the eyebrows are less sharply cut, and the eyes carry less expression. Also the tear-duct is more clearly given in the Oldfield head. In both heads the mouth is badly restored, with the result in the Pourtales head that the left corner is short, while in the Oldfield head the same corner is long and shapeless.

From a careful examination of such parts of the hair as are genuine it results, as already stated, that the restorer has made mistakes. He has not only over-elaborated the *crobylus*, but he has put it in the wrong place, and made it too large. Enough remains of the hair in the genuine parts to prove that the hair was gathered in a top-knot, but this must have been quite small, as in the Steinhäuser head of Apollo. In fact the Oldfield head has a somewhat similar relation to the Pourtales head as the Steinhäuser head has to that of the Belvedere Apollo: and in each case the restorer in



FIG. 2.—THE OLDFIELD HEAD. (RESTORATIONS SHADED.)

using the better preserved example as a model in restoring the worse preserved example has fallen into mistakes. For example, in the restored parts of the Oldfield head, the modern sculptor has closely copied the loose curls over the neck which mark the Pourtales head; and here he is certainly wrong, as the curls on the cheeks of the Oldfield head, which are antique, are quite different from those of the Pourtales head.

On the other hand, in setting the Oldfield head on the shoulders the Italian restorer has taken a line of his own, and has turned the face much to the left and downward, thereby altering its expression. Here I think he

would have done better to adopt the pose at present given to the Pourtales head.²

The measurements of the features of the Oldfield head, so far as antique, correspond approximately with those of the Pourtales head. Height from chin to roots of hair mm. 210: distance between outer angles of eyes mm. 105.

The Oldfield head is of good Parian marble³, the restoration from the mouth downwards is of Italian marble with blue streaks; the restorations of the face and hair are in a marble which appears to be Parian; probably fragments found with the head were worked up for this purpose.

Taking together the three heads of Overbeck's class β , the Castellani,⁴ the Pourtales, and the Oldfield heads, the question arises whether they go back to one or to two originals. Dr. Julius expresses his opinion that the Castellani head is a copy of a bronze original of the second Attic school, and that the other two (which of course go together) represent a modification of that original which arose in the time of Alexander or the Diadochi. With his dates I should be disposed to agree. At all events the Pourtales head appears to me to be a fine Roman copy of an original of the earliest Hellenistic age. This class of head may have originated with Lecchares, to whom the type of the Belvedere Apollo is now attributed by several archaeologists. Such heads are found on the coins of Antiochus I of Syria, early in the third century. The Oldfield head is doubtless also Roman of inferior and more timid execution, but from the same Greek original.

I fully agree with Prof. Overbeck that according to all recognized rules of physiognomy in Greek art, we must regard the expression of the Pourtales head as sad. The lines and forms of eyes and mouth are unmistakable, even resembling those of the Niobe. Sir Charles Newton's assertion that the 'earnest pathos of expression' is produced by the artist's attempt 'to represent the features of the god while under the influence of musical emotion and inspired by his theme,' falls short of the mark, for the expression of the face is not enthusiastic, but sad. This fact is somewhat perplexing. For it certainly seems that Apollo in the Pourtales and Oldfield heads is represented as a musical deity, or even as the leader of the choir of Muses. And the expression which we should expect in that case is the expression of the Apollo Citharoedus of the Vatican (Friederichs-Wolters, No. 1528)—enthusiastic and triumphant.⁵ The notion, familiar to the modern world, and expressed by Shelley in his well-known line 'Our sweetest songs are those which tell of saddest thought,' is not properly a Greek notion. Yet it seems to me impossible to avoid the conviction that here the Citharoedic

² Formerly the Pourtales head was set on a statue of Apollo to which it did not belong. See *Galleria Giustiniana*, Pl. 52.

³ I wish to thank Prof. H. A. Miers for his kindness in carefully examining the marble in my company, and giving me valuable information in regard to it.

⁴ In the British Museum: published by L. Julius, *Ann. d. Inst.* 1875, p. 27: *Mon. d. Inst.* x. 19.

⁵ In the poorly executed Vatican Citharoedus there is not much expression in the face, but the pose is decisive.

Apollo is represented as in a melancholy mood. And although such a representation is not in the main line of Greek artistic achievement, it would not be impossible to find parallels. It was the Greeks who accepted the notion, scouted by Coleridge and Wordsworth, that the song of the nightingale is sad. And in the Demeter of Cnidus we have a distinct example of a sorrowing deity.

After the age of Alexander, the stream of Greek sculpture, which had until then flowed in a few clearly marked channels, became less well defined and more dispersed. Individualism, which made great inroads on public life, affected art also; so that it becomes less easy than before to attribute statues to particular schools and periods. The Pourtales and Oldfield heads of Apollo are a record of the tendency and the idealism of a particular Greek master probably of the third century, whose name is unknown to us, and to whom we are at present unable to attribute other works.

II.—*Head of Apollo from the Mausoleum.*

The head of which a representation in profile is here given (Fig. 3) is by no means unknown. It was found by Sir Charles Newton among the ruins of the Mausoleum, and is mentioned by him in his *History of Discoveries*, II p. 225. It is figured as a head of Apollo in full face in Overbeck's *Kunstmythologie*, Pl. 20, 1 (Text III. p. 127).⁶ Until recently the front part only of the head was exhibited at the British Museum; but Mr. Murray having, at my suggestion, applied to it a back of a head in the store-rooms, which also came from Budrum, found that the two fitted together, with actual joining surface.

Overbeck apparently did not know of this back part, which is of importance, and he does not, as I think, in his text fully appreciate the head, though he rightly decides that it must represent Apollo rather than Dionysus.

Unlike almost all the heads of Apollo of this class, it is a Greek original of the fourth century, of very strong and clearly marked character, and untouched by restoration or working over. And the find spot, 'among the steps of the pyramid, in the Imaum's field,' on the site of the Mausoleum, gives us important evidence as to its school. It seems then worthy of a somewhat close study.

We will begin with the arrangement of the hair, which is very distinctive. In this matter Overbeck, being as I have said unaware of the existence of the back part of the head, has gone astray, and in consequence he has wrongly classified the head as one of those which have no artificial arrangement of the hair in corymbus or topknot. But the hair of the Mausoleum head is all drawn together in a knot above the back of the head, in a fashion not unusual for youths and young girls in Greek art, as I shall proceed to show.

I may first mention a group of heads with such coiffure which represent

⁶ Cf. *Brit. Mus. Cat. of Sculpture*, ii, p. 127, No. 1058; Pl. XX. Fig. 2.

Apollo. They are detailed, to the number of 11, in Overbeck's *Kunstmythologie*, Apollon, p. 150. According to Overbeck this class of head belongs to Apollo as mourning for Hyacinthus, a theory which is based upon a group at Deepdene, in which Apollo is represented standing, and beside him a boy holding what is supposed to be a discus. This theory does not seem to have any adequate foundation.⁷ In any case the heads of this class have no near likeness to that from the Mausoleum.

Somewhat nearer to our type are the heads mentioned by Dr. Klein in his *Praxitelische Studien*: first of a young athlete at Boston (Figs 1-4, 6, in



FIG. 3.—HEAD FROM THE MAUSOLEUM.

Klein); second of a Cora at Vienna (Figs 5, 7, in Klein); third of Apollo or a nymph found at Sinyrna, and acquired by M. Fournier.⁸ The engraving of this latter head in Le Bas is so poor, that it is impossible to form any notion of its style.

Both of these groups are regarded generally as Praxitelean in origin.

Passing from the arrangement of the hair, which is after all a quite external affair, to the character of the face, we approach a difficult task, in view of the mutilation of the marble. Anyone who examines the Plates of

⁷ The chief argument to prove that this group represents Apollo and Hyacinthus is the presence of the discus in the hand of the boy. But Michaelis (*Anc. Marbles in Great Britain*, p. 281) gives reasons for thinking that the object is not a discus. Nor does it appear

why Apollo should grieve for Hyacinthus while the boy was alive.

⁸ Le Bas, ed. Reinach, Pl. 143, 3. The date is given by M. Reinach as the first century B.C. He regards the head as female.

the *Kunstmythologie* will see that this head stands very much by itself. The forehead is narrow and triangular, with a marked swelling above the nose. The whole aspect is impassioned. The eyes are long and very narrow, the lower lid being almost straight.

The parts about the eyes are carefully and expressively modelled. The mouth is short and full, but much injured. The outline of the whole face is a long oval, the proportion of length to breadth being about 10 to 7.⁹ From the neck the face is turned to the left.

It appears certain that this head belongs to the fourth century, and more than likely that it is by Scopas or one of his companions in the sculpture of the Mausoleum, since it was found on the spot. And from our brief description of the head it will appear that the internal evidence corresponds to the external. The treatment of the parts about the eyes is such as belongs altogether to the second Attic school. Let us then look among the works of the sculptors of the Mausoleum, to see if we can find anything analogous.

It is astonishing how greatly our knowledge of the work of the sculptors of the Mausoleum has increased in recent years. When Brunn wrote his treatise on the frieze of the Mausoleum, and attempted to portion it out between the four, Scopas, Leochares, Bryaxis and Timotheus, we knew but little about any of these sculptors, and Brunn's grounds for attribution were mostly *a priori*. But now, as specimens of the work of Scopas we have the heads from Tegea, we have a copy of the Ganymede of Leochares,¹⁰ we have the basis of a trophy of Bryaxis, and pedimental figures from Epidaurus which are probably by Timotheus. Thus in dealing with this school of artists we are on very firm ground. We are not working from Roman copies which may or may not faithfully represent the originals; but mostly from those originals themselves.

Unfortunately, no Greek original among these is very helpful for the assignment or identification of the Mausoleum head. The heads from Tegea, with their massive framework, eager expression, and wide-open eyes, superficially present a contrast to ours. On the other hand, we may fairly trace a general likeness between it and the head of the charioteer from the smaller frieze of the Mausoleum, and a somewhat near parallel to the long, narrow eyes with straight under lids may be found in the heads of Herakles of the poplar-crowned type, which are usually given to Scopas.¹¹

A head which we must also compare with ours is that of the Apollo Citharoedus of the Vatican.¹² Apollo here appears with his attendant Muses, advancing in a fervour of inspiration, playing the lyre with both hands. This statue has by most archaeologists been regarded as a copy of

⁹ Height from chin to roots of hair mm. 255; from chin to line of eyebrows 180; between further corners of eyes about 122, but the marble is broken away at the right eye.

¹⁰ This is of course not a new attribution;

but recent studies put it on a firmer basis.

¹¹ *Röm. Mittheil.* iv, Pl. 8, 9. See below.

¹² Overbeck, *Kunstmythol.* Apollo, Pl. XXI. 32: text, p. 185; where the various engravings of the statue are enumerated.

the Palatine Apollo of Scopas,¹³ which appears to have been brought by Augustus from Rhamnus in Attica and dedicated at Rome. Since, however, Overbeck has called this attribution in question, it may be well briefly to recapitulate the evidence on which it rests.

On several of the coins of Nero, the Emperor is represented in an attitude almost identical with the Vatican statue. We might be sure beforehand that this Neronian statue would be an adaptation of a celebrated Greek original. And that the Greek original which was copied in this case belongs to the fourth century cannot be doubted, since such a type appears on several Greek and Italian vases of the fourth century.¹⁴ It is an adaptation of a type common on black-figured and early red-figured vases,¹⁵ an adaptation which can only have been made by a great sculptor of the second Attic school, and which seems to have rapidly secured fame in Greece. The statue is well-suited to an ardent, innovating, life-giving sculptor, like Scopas: and the words in which Propertius describes the Palatine statue of Scopas, 'Pythius in longa carmina veste sonat,' apply to it perfectly. Thus, though we are unable to construct a complete chain of argument to prove the Vatican statue to be a copy of a work of Scopas, we can certainly see that that view has a strong probability in its favour.¹⁶

At first sight the points of contrast between the Mausoleum head and the head of the Vatican Citharoedus will be more obvious than the points of likeness. But we must consider that the Vatican head is a Roman copy of a superficial kind, and shows none of the delicacy of expression and modelling which we should expect in a fourth century original, and which we find in the Mausoleum head. When we come to compare the two heads, detail by detail, the difference is by no means so great. The forms of forehead, eye and mouth, and the general outlines of the face are really not very different in the two heads. The Mausoleum head cannot have belonged to a figure in the attitude of the Vatican statue, for it is turned to the left and not to the right, in which latter direction, away from the lyre, the head of the musical Apollo is usually turned.

The results of our investigation are scarcely definite. It is, however, most probable that the head is of a musical Apollo: the inspired, and to some degree sensuous, expression is not to be mistaken. It does not belong to an Apollo of the type of the Palatine work of Scopas, yet it may be the head of a musical Apollo by Scopas of another type: and in fact in spite of the differences between this head and those from Tegea, there is sufficient likeness in the artistic treatment of the parts about the eyes to make one think that all these may be the work of the same artist.

¹³ Pliny, *N.H.* xxxvi. 25: Propertius II. 31, 6.

¹⁴ List in Overbeck, *K.M.*: Apollon, p. 323; Plates XXI. 18; XXIV. 20, 24, 25, XXV. 3. A relief on a wall-head of the Louvre, Pl. XXI. 14.

¹⁵ List, *ibid.* p. 322.

¹⁶ The objections brought against this view by Overbeck will be found in his *Kunstmythol.*: Apollon, p. 186. They are largely based on coins of Augustus and Commodus. While I am unable to explain the inconsistencies put forward by Overbeck, they do not seem to me fatal to the attribution.

But though this seems to me the most probable theory, it cannot claim anything like certainty. The head may belong to an Apollo by Leochares or Timotheus. Certainly it is a work of one of the great artists of the Mausoleum.

I had written thus far, when the possibility occurred to me that there might be among the sculpture from the Mausoleum some other fragments



FIG. 4.

belonging to the same statue as our head. And on visiting the Mausoleum Room at the British Museum, my eye at once alighted on a fragment of a shoulder¹⁷ of which an engraving is given above (Fig. 4). A head had been worked separately and let in. That this shoulder belonged to an Apollo

¹⁷ It is thus described in the British Museum Catalogue of Sculpture (ii, p. 128 ; No. 1061). 'Right shoulder of a draped figure, broken off half-way down the upper arm. The figure wore a sleeved chiton, and a large mantle, which was thrown back over the shoulders. The head of the statue was separately worked,

and set in a socket. The back is broken away.' There seems to be no record where exactly the shoulder was found ; but probably it was found on the north side of the Mausoleum, with our head and with many fragments of statues.

Citharoedus was at once obvious: the way in which the mantle was thrown back from the shoulder, to leave the arms free, and the sleeves, make this clear. Having obtained, through the kindness of Mr. Murray, a cast of the fragment, I have tried experiments in order to discover whether it could have belonged to the same statue as our head. The result cannot be said to be conclusive, as there is no touching surface: but the connexion seems to me probable.

At first sight the head seems to be on a much larger scale than the shoulder. But it seems that, as in the case of the Demeter of Cnidus, the head with drapery attached¹⁸ was let into a large hole, and the size of this hole makes the shoulder look smaller than it is. The arm is of very large size. The whole figure to which shoulder and head alike belong would be on the scale of the Deidamia of the Olympian Pediment, or the Niobe of Florence. The drapery is of inferior work to the head: but here again we can cite as parallels the Mausolus and the Demeter of Cnidus. I can find no conclusive reason why head and shoulder should not belong together: and it is not likely that there were in connexion with the Mausoleum two colossal statues of the Citharoedic Apollo. The accompanying cut (Fig. 4) will give the reader some notion of the problem. The blow which broke the head in two must have been one of great violence; the same blow may have driven in the base of the head with such force as to have broken the statue below to pieces.

Supposing that we have here the remains of an Apollo Citharoedus, we are unable to say whether the statue was seated or standing. The head was turned towards the left shoulder and the lyre, which is not usual but not unexampled: see *Kunstmythol.* pl. XXI. 29, 33, 34:¹⁹ it was also upturned, which is natural. In any case we have interesting fresh material for the study of the Citharoedic type of Apollo, and of fourth century art.

III.—*Scopas and Lysippus.*

Since we have been treating of the works of Scopas, it seems not out of place, in concluding this paper, to say a few words as to the present state of what may be called the Scopaeic question, as to our knowledge of the works of the master.

Since the discovery of the heads belonging to the temple of Athena at Tegea, Scopas has been to us one of the most distinctively marked of ancient sculptors. That those heads must be taken as the best evidence of his style is universally conceded; and their features, the deep skull, the powerful bony framework, the overshadowing eyebrow, the large eye and the breathing mouth, have been taken as definite traits of this sculptor. As a result of a comparison with these heads other works, such as the Meleager of the

¹⁸ Besides the drapery the fibula which fastened it must have been attached to the head.

¹⁹ Compare the coin of Argos: *Numism. Comment. on Pausanias*, I. xxiii. &c.

Vatican, the poplar-crowned Heracles,²⁰ and the female heads of Athens and Berlin (Brunn's *Denkmaeler* No. 174) have been regarded as copies of originals by Scopas. But although this view rests on some foundation, I think that we are compelled to re-examine it in the light of an important recent discovery, that of the statue of Agias, belonging to the group of marble figures set up by Daochos at Delphi, and described by M. Homolle in the *Bulletin de Corresp. Hellénique* for 1899.

With this figure of Agias was found at Delphi an inscription; and Mr. E. Preuner²¹ has been so fortunate as to discover among the papers of Stackelberg an inscription copied by him in Thessaly, and almost identical with that at Delphi just mentioned, but adding the important fact of the name of Lysippus as the sculptor. Mr. Preuner draws the inference that the statue of Agias is a replica in marble of a statue in bronze set up by Lysippus in Thessaly: and M. Homolle adds²² 'la restitution me paraît juste et seule possible.' If this be the case, we have now a far better authenticated specimen of the style of Lysippus than anything that we possessed before. The Agias is not actually a work of this great master: but it is a copy, probably a contemporary copy, of such a work. It represents an athlete who had won many victories a century earlier than the date of the statue; so it is not strictly speaking a portrait, but rather an ideal athlete reflecting fully the style of Lysippus.

Before the evidence of a Lysippic origin of this statue had been discovered, M. Homolle had found in the whole group of statues to which it belongs more of Scopas than of Lysippus: 'L'analyse du style . . . permet de découvrir les influences mélangées de Praxitèle de Scopas et de Lysippe, dans les types les poses et les proportions. C'est du second que le caractère paraît le mieux marqué, et c'est dans son école que l'œuvre aura été exécutée. And, in fact, so long as the head of the Vatican Apoxyomenus was our type of the heads of Lysippus, it was almost inevitable that the head of Agias should be attributed to the school, not of Lysippus, but of Scopas. The arch of the eyebrows, the intense expression, the parted lips, remind us of the Tegean heads, though at the same time there are not inconsiderable differences: the head of Agias for example is less deep from back to front, and his eyes are less full.

The figure of Agias is not a first-rate work of art: it is of somewhat careless finish: though the worst features, the thick ankles, and short lower-legs, are due to modern restoration. But such as it is, we are bound to take it as our best evidence for the style of Lysippus; the Apoxyomenus has no such claims to be regarded as evidence, for it is attributed to the master only on internal evidence. Thus the new discovery amounts to something like a revolution. I do not propose here to discuss all its bearings: that is a work which must be done by someone else; but it is a task of great difficulty and

²⁰ See especially Graef in *Röm. Mittheil.* iv.

Corresp. Hellén. for 1899, p. 422.

²¹ See E. Preuner, *Ein Delphisches Weihgeschenk*, 1900; and L. Homolle in *Bulletin de*

²² *Bull. Corr. Hell.* 1897, p. 598.

complexity: I will make a few observations, first on the type of head, and next on the type of body, which we must apparently regard as Lysippic

Before the discovery of the Tegean heads, we had been accustomed to regard the deep set eye, the overhanging brow and the breathing mouth as Lysippic peculiarities. They were conspicuous in some of the representations of Alexander the Great, especially on coins; and the type of Alexander, according to Plutarch, was fixed by Lysippus. But when the Tegean heads were found we had to allow that these traits belonged also to the works of Scopas. The next step was natural: in view of the head of the Apoxyomenus, we were disposed to think that the traits in question belonged specially to Scopas, and that Lysippus was less animated and more conventional in his art.²³ But now if we take into account the head of Agias we must retrace our steps, and allow that Lysippus was in his own way as notable for these traits as Scopas. We must henceforth content ourselves with a much finer line of distinction between the two masters, who apparently had much in common.

Next as regards physical type. I have not yet seen in print an observation which I have to make. Placing side by side the statue of Agias and that of the young Heracles of the Lansdowne Collection,²⁴ which is now usually regarded as Scopas, one finds them to be almost identical in pose type and proportions. The Lansdowne Heracles is then definitely a Lysippic work, as Michaelis had already judged.²⁵ Point by point it runs parallel to the Agias, with two notable exceptions. First, it is more powerful and solid, with thicker neck, broader shoulders, and more strongly marked muscles; in the back in particular the forms of the muscles under the skin are more strongly accentuated. This greater force and solidity is obviously appropriate to Heracles, as compared with a mere human athlete. And second, the head does not resemble the head of Agias: rather it is like the type found in the head of the 'Meleager' of the Vatican, and hitherto given to Scopas. But is this type of head really of Scopas? It has points of resemblance to the Tegean heads: but it is not strikingly like them. One can see that the head in *Antike Denkmäler* I. 40 is like the work of Scopas. And one may allow a strong influence of Scopas in the heads of Heracles in the poplar-wreath. But the Meleager head seems to me so distant from these, that it can scarcely be given to the same master. It has become an eclectic, ordinary type: and the sculptor who made the Lansdowne Heracles adopted it as one familiar to him, while in the body he certainly followed Lysippus.

In fact, if one places the Meleager of the Vatican side by side with the Agias and the Lansdowne figure, it will present anything but a contrast with them. To judge from photographs of the Meleager, the bodily type and the head alike would seem, in view of our new evidence, to be rather in the

²³ Mrs. Strong, in the *Classical Review* for April, 1901 (p. 188), writes, 'the expression has the true Skopasian inwardness, of which the superficial externalizing Lysippus shows himself incapable.' So sweeping a statement

as this in regard to Lysippus has never been justified by the evidence, and is in direct contradiction to the statement of Plutarch.

²⁴ *Specimens*, i. Pl. 40: Clarac, v. 788, 1973.

²⁵ *Anc. Marb. in Great Britain*, p. 451.

style of Lysippus than of Scopas. But of course without study of the original, or at all events of a cast, I cannot go further in this matter.

On the other hand the only figure of Heracles attached to a head of the poplar-crowned type, which is in the Louvre,²⁶ is of a thoroughly different



FIG. 5a.—STATUE OF AGIAS FROM DELPHI.



FIG. 5b.—THE LANSDOWNE HERACLES.

character, thick-set and clumsy. Whether it is in the style of Scopas or not we have scarcely any means of judging; certainly it is so poor a work that it can have no close relation to the master. But it does not seem to

²⁶ *Röm. Mittheil.* iv. p. 193.

have anything to do with Lysippus. It would look then as if the result of a closer examination might be to retain the Heracles type for Scopas and to assign the Meleager type to Lysippus. But I make this suggestion in a merely tentative way. In fact Scopas and Lysippus were as sculptors more nearly akin than we had hitherto at all imagined.

Another work of the fourth century which has a striking likeness to the Agias and the Lansdowne Heracles is the beautiful sepulchral relief from the Ilissus.²⁷ The likeness of the head of the young athlete in this relief to the head of Agias is striking. Although the influence of the second Attic school dominated the tombs of Attica in the fourth century, there is no reason to think that that school had a monopoly in their execution, or that an Argive artist may not sometimes have been employed.

It at once appears that if the Lansdowne figure gives us a Lysippic type of Heracles, Lysippus can have but a very distant connexion with such an extreme and exaggerated work as the Heracles of Glycon, and other statues of Heracles of that type.

But the most serious question is as to the Apoxyomenus. It has always been supposed to be the best example of the work of Lysippus, and its finish of surface has been taken as a confirmation of the criticism which Pliny preserves, 'argutiae custoditae in minimis quoque rebus.' I greatly doubt whether in consideration of the Agias we shall not have entirely to recast our view of the Apoxyomenus. We now see that Lysippus did not work in this minutely anatomical way. It is interesting to compare with the Apoxyomenus the fighter of Agasias of Ephesus in the Louvre (Brunn's *Denkmäler*, No. 75). The figure of Agasias is more exaggerated, more detailed, certainly the work of a later age, but yet the Apoxyomenus shews in some respects an approximation to it. The heads certainly differ in type. The one statue is in repose, the other in violent action; yet if one imagines the Apoxyomenus suddenly put in an attitude of strain, his muscles would leap out in this manner. They are of the same highly trained nervous type. The long flat and lean feet of the two statues are much alike. The feet indeed are in the case of the Apoxyomenus a feature which can scarcely be reconciled with a fourth century origin. If we compare them with the foot of the Hermes of Praxiteles we shall find not merely a difference of school, but a difference so deep that it must shew a different date. And can another work of the fourth century be found which shews the mastery of anatomy, and the precision in the rendering of detail, which we find in the Apoxyomenus? We must not forget that Lysippus was not the successor of Praxiteles and Scopas but their contemporary, and doubtless his work was more like theirs than it was like work of the anatomical schools of Asia Minor.²⁸

²⁷ Gardner, *Sculptured Tombs of Hellas*, Pl. XV.

²⁸ My friend Mr. K. T. Frost, who has made a careful study of athletic art, writes to me as follows in regard to the Agias and Apoxyome-

mus:—'In the Apoxyomenus the whole conception of the human figure, the whole athletic ideal, is different. The Apoxyomenus has the tendencies of the Agias towards length of limb and lightness of frame carried a step fur-

Thus I think we have been wrong in regarding the Apoxyomenus as giving us precisely the manner of Lysippus. In fact, there is none but internal evidence to connect this particular statue with Lysippus at all. Recently Dr. Loewe²⁹ has called attention to the similarity between the head of the Apoxyomenus and those of the 'Praying Boy' and the Hermes of Herculanum, and to the likeness of pose between the Apoxyomenus and the Praying Boy. But these likenesses may be used to prove not the Lysippic character of the works mentioned, but the Hellenistic character of the Apoxyomenus. It naturally occurs to one that the Vatican statue may be a copy, not of the Apoxyomenus of Lysippus, but of the Perixyomenus of Daippus (Pliny, *N. H.* xxxiv. 87), the son or pupil of Lysippus. This statue stands, as regards the rendering of muscles, midway between the work of the middle of the fourth century and that of the Hellenistic schools of Asia Minor. Thus it would very well suit the period of Daippus.

It may of course hereafter turn out that too much confidence must not be placed in the evidence offered by the Agias, and that the head in particular does not conform to the Lysippic type. But even if fresh discoveries drive us to this opinion I think it unlikely that the Apoxyomenus will recover its position as the type of Lysippic art.

P. GARDNER.

ther. The Agias is alert; but it is the alertness of stability: the Apoxyomenus, lightly poised, seems able to spring off in either direction: the waist tapers more, the limbs are yet longer, and are made to seem even longer in proportion to the body than they really are. Compare for example the lower legs of the two' (apart from the restorations): 'in the Apoxyomenus the muscles of the calf are short and swelling, while the tendons which taper from calf to ankle contribute to the grace which permeates the entire design. In the Agias, and in the elder Sisyphus, the calf muscles are longer and the lower portions of the legs fuller. The hollow back of the Apoxyomenus, the way in which the muscles sweep inwards at the waist from above, and outwards below, while the steel-like subsidiary tendons and sinews prevent

the slinness from suggesting any lack of strength, find no counterpart in the Agias, whose back is treated rather sketchily, and whose waist, though fine, depends more for its strength on the general solidity of the frame than on specially developed muscles. It is difficult to believe that the two statues represent works by the same artist: it is not only the type of man but the way in which that type is expressed which forms the contrast. The Apoxyomenus, however, compares well with the Fighting Warrior of Agasias: both have the physical character which we associate with the thoroughbred, and towards which Greek art seems to have progressed.'

²⁹ *Röm. Mittheil.* 1901, p. 391, Pl. XVI, XVII.

THE COUNTRY CART OF ANCIENT GREECE.

THE vase painting reproduced in Fig. 1 is taken from a large red figured pyxis in the National Museum at Athens. Both lid and body are decorated with wedding scenes, which will be described in detail below (see p. 150); we are here more particularly concerned with the group on the body, in which the bridal pair are represented as driving to their new home. They are seated in a low cart drawn by two horses; the bride appears to be sitting in front of her husband, but is probably meant to be by his side. The horses are led by a young man, whose exomis and pointed cap mark him as a servant. The attempt to render the cart in a realistic manner has involved the artist in great difficulties. The two wheels, which are of the ordinary four-spoked type, are supposed to be seen in perspective, but they are drawn as if they were both on the same side of the cart, the one over-lapping the other. The axle and its attachment to the body of the cart have been entirely omitted, as have also the pole, yoke, and most of the harness. The side is decorated with curved lines and sprigs of foliage. This vehicle is very well adapted to the functions of a wedding-coach as these are described in Suidas under the heading *ζεύγος ἡμιονικὸν ἢ βοϊκόν*.¹ The bride is fetched in this vehicle from her father's house and sits in the middle with the bridegroom on one side and the best man on the other. Pollux² mentions that on such an occasion a temporary seat was put in to accommodate the three side by side. But, common as it must have been in real life, this type of conveyance appears but rarely in art. The orthodox wedding-coach of vase-paintings, both black-figured and red-figured, is generally the quadriga,

¹ *ζεύξαντες τὴν λεγομένην κλινίδα, ἣ ἐστὶν ὁμοία διέδρῳ, τὴν τῆς νύμφης μέθοδον ποιοῦνται· παραλαβόντες δὲ αὐτὴν ἐκ τῆς πατρῶας ἐστίας ἐπὶ τὴν ἄμαξαν ἄγουσιν εἰς τὰ τοῦ γαμοῦντος ἐσπέρας ἱκανῆς. Κάθηνται δὲ τρεῖς ἐπὶ τῆς ἁμάξης· μέση μὲν ἡ νύμφη, ἐξ ἑκατέρου δὲ ὁ νύμφιος καὶ ὁ πάροχος· οὗτος δὲ ἐστὶ φίλος ἢ συγγενὴς ὅτι μάλιστα τιμώμενος καὶ ἀγαπώμενος. Ἐπειδὴ δὲ ἡ ἄμαξα ὄχημα λέγεται, ὃ ἐκ τρίτου παροχούμενος πάροχος ἐκλήθη ἀπὸ ταύτης τῆς συνθηκῆς, κὰν περὶ τινες μετίωσι κόρην, ὁ τρίτος συμπάρων πάροχος λέγεται.*

² Poll. *Onom.* x. 33, οὐ μέντοι ἀγνωσὶν ὅτι κλινὶς ἐκαλεῖτο τὸ ἐπὶ τῆς ἁμάξης καταστορνύμενον, ὅταν

μετίωσι τὰς νύμφας, ἐφ' οὗ κάθηται ἡ νύμφη μετὰ τοῦ παρόχου τε καὶ τοῦ νυμφίου. Photius *s.v.* κλινὶς has a statement to the same effect. Suidas is probably wrong in saying that the cart was called κλινίς. On a krater in the Central Museum at Athens (No. 1388) whose subject is a wedding procession, Eros and 'Nike' are represented placing three large cushions in the quadriga which is to convey the happy pair away. Cushions could be of no use in a quadriga: but a scene like this shows that putting them into the carriage was a regular part of the preparations for the bride's departure.

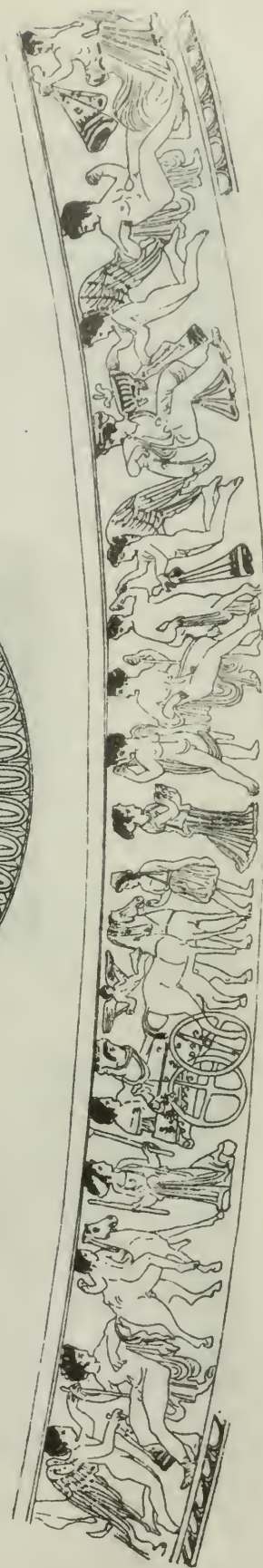


FIG. 1.—PYXIS AT ATHENS.

rarely the biga; in any case it is a racing chariot. Such chariots, however, would be in the possession of the richest citizens only, and cannot even by them have been used for this purpose, for they could contain only two persons, and these were obliged to stand. They appear on the vases because they are the form of vehicle consecrated in serious art; but the Athenian citizen must always have had some more practical means of conveyance, one form of which is represented on the pyxis. But what the writer in Suidas thought it worth while to describe as a curiosity must have been something more primitive and rustic than the equipage of this bridal party. The mention of the ox indicates that what is meant is the farm-cart, which on great occasions would be put to exceptional uses. Few as are the representations of the cart in Greek art, they show it engaged in the various functions which fall to the lot of a cart-of-all-work, and also at very different stages of development.



FIG. 2.—RELIEF IN THE VILLA ALBANI.

The most primitive type of all occurs on a comparatively late piece of work. This is a Hellenistic relief³ in the Villa Albani at Rome, which represents Silenus supporting the child Priapus on a cart of very rude form. It consists of a platform made of roughly dressed tree stems laid cross-ways on a framework, and carried on two block-wheels, only one of which is visible. The square axle head sunk in the disc of the wheel shows that, as one would expect in a cart of this type, the axle was not fixed, but revolved with the wheels; the axle-bar, however, is not shown, nor the means of attachment to the frame-work. The end of the pole is visible between the draught-animals, a he-goat and a panther; one end of the yoke which should rest on it is shown on the panther's neck, but has been placed too high. This is as primitive a structure as can fairly be called a cart. This relief exemplifies

³ Published by Schreiber, *Hellen. Reliefbilder*, lix.

the connection of the waggon with the religious observances of country life, and the same is in all probability true of an example which is of much earlier date, and shows the construction more clearly. This is a beautiful little Etruscan bronze ⁴ in the British Museum, representing probably Demeter seated on a cart. It dates to the end of the 6th or the beginning of the 5th century, and is thoroughly Greek in feeling. The cart consists of a rectangular frame-work, formed by three parallel poles united by three cross-pieces: a folded cushion has been placed on it on which the goddess sits. At both front and back there is an extra cross-piece, which is laid on the top of the poles, and has a groove cut at each end, as though for the purpose of attaching some object placed on the top. This would probably be a basket made to fit the skeleton frame-work, which, unless it had some covering, would be useless for most kinds of transport. Hesychius defines the Homeric *πείρωθα* as a basket of this sort: his words are *πλέγμα τὸ ἐπὶ ἀμάξης· τὸ πλινθίον τὸ ἐπιτιθέμενον τῇ ἀμάξῃ τετράγωνον*.

The central shaft of Demeter's cart is prolonged to form the pole: its end rests on the top of a curved cross-yoke, in which a depression has been cut to receive it. The draught animals have unfortunately disappeared. The axle, being meant to revolve, could not be rigidly attached to the frame-work. Each of the outer poles has fastened to its lower side a block in which a deep notch with a semi-circular head has been cut; the axle was inserted in these, and as it was not secured in any way, the frame-work could be lifted with the greatest ease. This careful adjustment of the axle is a great advance on the very primitive method from which it has developed. This consists in merely securing the axle between two pairs of pegs which project perpendicularly, one pair on each side of the cart.

The realism of the model does not extend to the wheels. These are in the form of flowers with five petals, whose stalks are looped together to form the axle. It is a pretty conceit to give these flower-like wheels to the goddess of vegetation: but it is none the less evident that they are a very simple adaptation of the rude block wheel of the Hellenistic relief.

This type of frame-work in which the pole is of one piece with the central shaft is characteristic of the cart even in its more elaborate developments. In early vase-paintings of chariots the pole seems in the same way to pass into the frame-work: later it seems to have been a separate piece attached after the frame-work was complete, and in red-figured vase paintings can generally be seen passing under the body. As the wheels of the chariot were of no great size, the body, which rested directly on the axle, was near the ground. It was natural that this should be so, for the racing chariot preserved the form of the war-chariot, and the war-chariot was constructed to allow of the occupant getting in and out with ease. But had the pole continued the line of the floor, as it does in the case of the Demeter cart, the body would have been tilted up in front when the horses were yoked. To avoid this the pole was curved, sloping sharply upwards from the front of

⁴ Published in the *B. M. Catalogue of Bronzes*, Pl. XII.

the car. In the case of the cart, the difficulty of keeping the framework horizontal was solved in another way. The axle-blocks already referred to, which were originally provided as a means of holding the revolving axle in place, are increased in size, and the body is thus raised to the required height. Sometimes the pole is bent upward as well, but it does not cease to form part of the frame-work. These axle-blocks characterise the cart through the whole course of its development, and seem never to occur in the case of the chariot. Figure 6 affords a clear illustration of them.

Though in most respects this model agrees with the representations of the Greek cart on vase paintings, one feature characteristic of the latter is absent, namely, the so-called archaic wheel, which in place of spokes has a diametric bar with two cross-pieces at right angles to it. The distribution of this type, which is not confined to Greek lands, will be considered later. A very curious instance of it occurs on a small lead model found by Cesnola at Salamis in Cyprus.⁵ This model, which is in a rather fragmentary condition, represents a cart of the same type as the preceding one. The body, which is very short from back to front, consists of three parallel poles united by two cross pieces, the central pole, as before, being prolonged in front of the frame-work. It ends in a yoke cast in one piece with it, and is strengthened by braces, now greatly damaged, which converged on it from the two front corners. At each of the three corners which are preserved, the cross-piece projects a little, and has a groove round it, which must have served the same purpose as the corresponding grooves of the Etruscan cart. Both wheels are preserved, though in an imperfect condition, and quite separate from the body. They are of the cross-bar type described above, and present a very singular feature, being not round, but markedly oval. This may represent a local peculiarity, for another oval cross-bar wheel occurs on a Cyprus terracotta to be described below. Elsewhere the cross-bar wheel is round. The axle heads are not circular, but oval, showing that the wheels were fixed and the axle revolved. In spite of the primitive appearance of this model, it is probably of no very great antiquity, for leaden objects do not seem to occur in the early graves of Cyprus.

Greek vase-paintings furnish a certain number of representations of the farm-cart; but purely *genre* scenes are so infrequent that it is seldom found engaged in its every-day avocations. However, a well-known b.f. vase of the Campana Collection in the Louvre⁶ exhibits two vigorous little rustic scenes, in one of which a cart appears, drawn by a pair of mules, and laden with a couple of huge amphorae. Behind these the head and arm of the driver emerge as he leans forward to prick his beasts with the goad. The cart has no sides, and the pole is continuous with the frame-work, which is slightly tilted. The wheel is again of the cross-bar type, and has an oblong axle-head; part of the axle is shown, but not the means of attachment to the frame-work.

The farm-cart must do duty on all the great occasions of rustic life,

⁵ Figured Cesnola, *Salamina*, Pl. VI. 1c 1d.

⁶ Pub. Baumeister, *Denkm.*, Pl. I. 13a.

weddings, feasts, and funerals. It appears as a funeral car on a b. f. vase published on page 5 of the *Sculptured Tombs of Hellas*. The dead man lies on his kline, which has been placed on the cart, on the floor of which, with their legs hanging over the edge, sit two mourning women, one on each side of the couch. The cart is similar to the last specimen, save that the body is raised so high as to be level with the top of the cross-bar wheel, no doubt by means of blocks like those of the Etruscan cart, but higher. A projection which looks like one side of the notch to hold the axle can be seen in front of the diametric bar. In this instance also the cart is drawn by mules.

The excavation of the Cabeirc sanctuary near Thebes has yielded many interesting vases, on two of which fine specimens of the cart occur. These vases, which have sustained a good deal of damage, were both large skyphoi.⁷ The first offers an interesting parallel to the scene on the pyxis: the subject, which is handled with a good deal of rough humour, is a wedding procession grotesquely treated (Fig. 3). The scene is from low life. First comes a bridesmaid wearing a pointed cap, dancing and waving a taenia above her head, then the orthodox flute-player, a fat elderly personage mounted on the shoulders of another man who supports himself with difficulty by means of a walking-stick. Next comes the wedding-coach, a light cart with a low side and a



FIG. 3.—SCENE FROM A CABEIRC VASE.

very high cross-bar wheel, drawn by a spirited pair of galloping donkeys crowned with wreaths. The bride and bridegroom are seated side by side on separate stools. The bride holds in her left hand a circular object, apparently a hand-mirror, on which her eyes are fixed. The bridegroom is an elderly man whose baldness is partly concealed by a wreath. The *πάροχος*, whether by mischance or malice, has been left behind, an accident likely enough, at a wedding of this type, to befall a person so obviously superfluous, and is vainly endeavouring to get up at the back of the cart.⁸

⁷ The reproductions of the two Cabeirc vases are taken from proofs of plates belonging to the forthcoming publication of the German Institute. I am indebted for permission to use

them to the great kindness of Dr. Wolters.

⁸ This vase has as yet been only briefly noticed by Furtwängler in the *Berliner Philologische Wochenschrift* for 1888, p. 1483, and by Winne-

This cart is much lighter and higher than the previous specimens. The wheel is remarkably large; the axle-block seems to be of the ordinary solid type, though a small patch has inadvertently been left unpainted. The axle-head is not shown. The side is covered with cross-hatching which no doubt represents wicker-work. That this vehicle is the ordinary coster-cart of antiquity is shown by the painting on the second vase (Fig. 4), which represents a precisely similar cart laden with four large amphorae and drawn by a pair of mules; a man walks in front holding the reins. The side of the cart is covered with hatching. The wheel is of the same large slender make: neither axle-head nor axle is shown, but the latter was apparently secured in the primitive manner referred to above, by a couple of pegs inserted in each of the axle-blocks; at least, one such peg is clearly visible in front of the diametric bar. Owing to the great height of the wheel, the body in the case of both these carts is raised very little above the level of the axle.



FIG. 4.—SCENE FROM A CABEIRIC VASE.

These Cabeiric vases probably belong to the latter half of the fifth century, and are at least not earlier. The occurrence on them of the so-called archaic wheel is sufficient to prove that it is not archaic at all; for it cannot be supposed that the artist meant to represent anything but the carts which he saw every day.

The archaic plate in the British Museum⁹ which represents the sacrifice of a goat shows the farm-cart once more diverted from its everyday uses and taking part in the festal procession. Again we have the pair of mules, the cross-bar wheel, and a side of wickerwork, but there are no structural details.

feld in the *Athenische Mittheilungen* of the same year. Neither takes the subject to be a wedding procession: the one describes it as a man and his wife, the other as the Cabeiric goddess herself, driving to the sanctuary. These interpretations

leave the figure of the *πάροχος* unexplained, and it is unnecessary to suppose that the subject of every vase dedicated in the Cabeirion was connected with the sanctuary.

⁹ Published *J.H.S.*, Vol. v. Pl. VII.

It appears that no seat has been put in, for the driver and two other occupants stand: the fourth is seated backwards on the tail-board.

A cart partly preserved on a fragment of one of the Corinthian votive pinakes now in Berlin may perhaps be also taking part in some religious procession. It is a less primitive vehicle than those hitherto considered, and appears to be made entirely of wood. The animals and front of the cart have been broken off (Fig. 5), and also the upper part of the only occupant, the driver, who stands erect. The side is secured by a long pin, perhaps of metal, which passes behind a strap or metal band attached to the side and runs into the floor. The driver's left hand rests on the head of a similar pin, which is drawn as though it were also on the side of the cart nearest the spectator; in reality it must be supposed to fasten the further side. The cross-bar wheel is of a fairly large size; the axle-block however is low, and the floor of the cart is slightly tilted, but the top is kept level, the side diminishing in height towards the front. The axle-head is oblong.



FIG. 5.—CORINTHIAN PINAX AT BERLIN.

In addition to its other uses, the farm-cart must frequently have been used by the country people as a means of travel, and in this character it appears on a Chalcidian vase in the British Museum¹⁰ (Fig. 6). The traveller, a bearded man, sits on a cushion placed on the floor of the cart, which has no sides



FIG. 6.—FROM A CHALCIDIAN VASE IN THE BRITISH MUSEUM.

and, like the Cyprus lead model, is very short from back to front. The pole passes into the framework; it bends upward, however, like a chariot pole. In

spite of this, very high axle blocks are necessary to keep the frame level, owing to the small size of the wheel. This is of the cross-bar type, but the axle-head is circular, showing that the axle was fixed, and the wheels revolved independently of it. Both speed and smoothness of motion would be greatly increased by this alteration. The animals are mules, as is usually, but not invariably, the case, and are apparently led by a man who walks at their heads, but the reins are not shown. The traveller holds a whip.

An interesting terracotta of the late sixth or early fifth century, found in Cyprus and now in the National Museum at Athens,¹¹ exhibits a somewhat elaborated country cart adapted for travel by the addition of a tilt. In this rough but spirited model (Fig. 7) the sides of the cart are continued down to the ground, to make a strong support for the tilt above, and the cross-bar wheels are modelled on the outside of the surface. They are slightly oval,

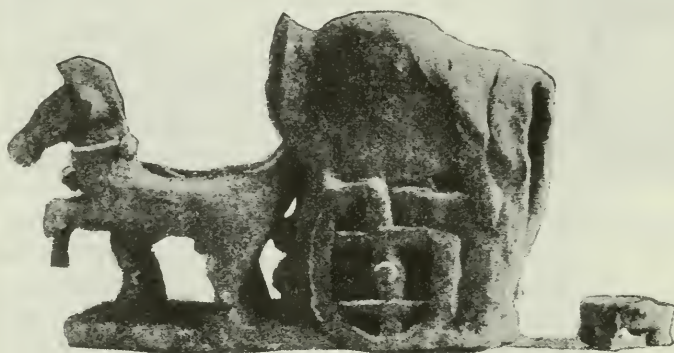


FIG. 7.—TERRACOTTA FROM CYPRUS. ATHENS.

measuring .06 m. horizontally, and .075 m. vertically, and reach just to the top of the side. The axle-head, a well-marked button-like projection, is circular. The space beneath the floor of the cart is entirely enclosed, the front and back being filled up with clay. A square hole in the floor of the cart communicates with this confined space, and may perhaps have served as a socket in which to set a figure. It interferes with the line of the axle, and cannot reproduce any feature of the actual waggon. The animals, which appear to be horses rather than mules, are in the attitude of galloping, their fore-legs being raised from the ground; a clay support is introduced under their bodies. The pole once ended in a double yoke, of which only a fragment now remains on the neck of the near horse; below this fragment a collar is modelled on the animal's neck. The tilt was added after the completion of the cart and horses, as is shown by the fact that in front holes have been left to admit the tails of the horses, which pass over the front board into the cart.

¹¹ This terracotta formed part of the collection of the late M. Philemon, Greek Consul in

Cyprus, and was certainly acquired there, though the exact provenance is unknown.

Along each side and across each end of the cart the artist made an arch of clay, and joined the two side ones by a horizontal cross-piece at the top. He then filled up the spaces at the sides and top with slabs of clay, and plastered the whole over, concealing for the most part the lines of construction, which can now be seen properly only on the inside; however, the spring of one side arch and that of the back one are quite visible on the outside and are shown in the reproduction. There seems no reason to doubt that real tilts were made in this way. An opening was left in the tilt in front: the back, however, is entirely open, and as there is no tail-board, this is much the larger of the two apertures. Evidently the passengers got in at this end. Inside the cart, and presumably found along with it, is a small clay seat with four legs, which also appears in the reproduction. It is intended for one person only. Such a cart, while still fit for miscellaneous work, would be very suitable for travel. Owing to the fixed axle, its speed would be much greater than that of the ordinary farm cart; it could hold several persons, and the tilt would afford protection against the heat, and shelter by night. Plutarch¹² tells how a party of Peloponnesian envoys on their way to Delphi passed the night at Megara sleeping in their carts, together with their wives and children, and how a party of tipsy Megarians earned for themselves the title of *ἀμαξοκυλισταί* by rolling the vehicles and their occupants into a neighbouring lake.

Several references to the tilt under the name of *σκηνή* occur in literature, generally in connection with the closed carriages known as *harmamaxai* or *apenai*, appropriated in the East to women and grandees. Plutarch, describing the manner in which Themistocles was conveyed to the Great King, says that oriental women travel in *ἀρμάμαξαι, ὑπὸ σκηνὰς κύκλω περιπεφραγμένας*,¹³ and that such an apene was prepared for Themistocles. Diodorus¹⁴ uses the name apene only, and says that it was adorned with costly carpets, which must have formed the awning. The ambassador in the Acharnians¹⁵ describes the journey of his party over the Caystrian plain, *ἐσκηνημένοι ἐφ' ἀρμαμαξῶν μαλθακῶς κατακείμενοι*. In the Cyropaedia Panthea, when she has parted from her husband, is led away by her attendants, who make her lie down in her *harmamaxa* and cover her with the skene.¹⁶ The tilt is but rarely met with in art. Two terracottas may be mentioned, each of which represents a covered cart with a figure seated at the opening in front. The first of these was found in Cyprus at Amathus.¹⁷ The cart and tilt are represented by a solid arched mass of clay whose base rests on the ground; on the side a small block wheel is modelled. Behind the wheel there is an attendant similarly modelled in rather low relief. In front a cavity has been hollowed out, in which can be seen the head and bust of a lady.

¹² *Quaest. Graec.* lix.

¹³ *Vit. Them.* 26.

¹⁴ xi. 56.

¹⁵ i. 70.

¹⁶ Xen. *Cyrop.* vi. 4. 11.

¹⁷ Pub. Ohnefalsch-Richter, *Cyprus, the Bible, and Homer*, Pl. 196.

The second terracotta, which comes from Alexandria, is in the British Museum.¹⁸ The carriage is in this case four-wheeled, and is drawn by a pair of animals whose character cannot be determined. The tilt, which is covered with a lattice pattern, has a window of four panes in one side; it must be a permanent part of the carriage and not a removable awning. The passenger, or perhaps the driver, sits in a shallow niche hollowed out in the front of the tilt, which is otherwise left solid. These two terracottas come from localities which were meeting-places of East and West, and doubtless represent the Oriental *harmamaxai*.



FIG. 8.—FROM A R.F. AMPHORA AT MUNICH.

A red-figured amphora in the Munich collection (Fig. 8) shows a lady travelling in an open cart somewhat resembling that on the Chalcidian vase already quoted, and evidently developed from that primitive type. The body is again very short from back to front: a seat has been put across it on which the lady sits facing the horses. The cart has now a side made of planks, which is high above the wheel, to protect the passengers from splashing, but cut away in front, to allow of their getting in; they could no longer do this from the back when the seat was a fixture, as it probably would be in a carriage intended to carry persons only. At the feet of the lady and on the edge of the cart sits the driver, a servant, to judge by his pointed cap and scanty attire, and also by his position; an equal in rank would naturally have sat by the passenger's side. It is rather surprising to find the primitive wheel on a carriage of this type, which, to judge by the neat carpentry and the use of horses instead of mules, must have belonged to a

¹⁸ Published by Mr. G. F. Hill, *J.H.S.* xvii. p. 88.

person of some consideration. The axle apparently revolved; there is no axle-head, but a very thick cylindrical axle is visible behind the wheel, which apparently was nailed or otherwise secured to the end of it. The axle-block is very high.

Part of a very similar cart occupied by two men can be seen on a small fragment of a black-figured pinax from the Acropolis now in the Central Museum at Athens. It has a four-spoked wheel, and is drawn by four horses. The driver sits on the seat occupied by the lady on the Munich amphora, and the second man sits behind him. The back of the cart is unfortunately broken away, so that it is not certain how this second person was placed; but a similar representation on a b. f. oinochoe in the British Museum makes it probable that he sat on a second bench, back to back with the driver. On the oinochoe the driver sits side by side with one companion on the front seat; behind and back to back with them sits a third person, who turns his head over his shoulder, as though in conversation with those in front. The cart has sides of wicker-work and a cross-bar wheel. The drawing is careless, and the axle and its attachment have been omitted; the body of the cart, however, stands very low, and the pole slopes upwards. A terracotta model of a cart and horses is published by Fröhner, *Hoffmann Collection*, 1886, p. 4, no. 3, pl. ii. The cart has a cross-bar wheel with a circular axle-head. The cart of the wedding-pyxis belongs to the same class as that of the Munich amphora, though the side is differently shaped, and the spoke wheel has ousted the more primitive form.

The cart in this form was also used for racing. Pausanias tells us that from the 70th to the 84th Olympiad there was a race for mule-carts (*apenai*), and two such victories are celebrated in Pindaric odes. Messana and Rhegium in the 5th century struck coins to commemorate successes in this race¹⁹; the type is a cart drawn by mules in which the driver sits facing his team. That there was a similar race at the Panathenaic festival is proved by the occurrence of this agonistic type of cart on several of the Panathenaic amphorae in the British Museum; probably the practice originated at local festivals, and may have continued there after the mule-cart had been banished from Olympia as unsuited to the dignity of the occasion. The paintings on the Panathenaic vases are large and clear, and enable us to trace the modifications which converted the travelling into the racing cart. That on the Burgon vase, though damaged, is the most interesting of the series, for it alone retains the cross-bar wheel characteristic of the country cart; on the coins of Messana and Rhegium, as well as on the other Panathenaic vases, the wheel is four-spoked.

On the Burgon vase the axle-head, though damaged, is plainly circular, and the axle is therefore fixed, as indeed it would necessarily be on a racing cart. The wheel is of great height and so are the axle-blocks, which are strengthened by a cross-piece above the axle. The cart seems to be entirely

¹⁹ In the case of Rhegium there is a definite statement to this effect. See B. V. Head, *Hist.*

Num. pp. 92, 93, and the passage from Aristotle, quoted Pollux v. 75, there referred to.

of wood. That part of the vase on which the front and the pole of the cart were represented has unfortunately been lost, but the other paintings of the series show arrangements evidently made to secure the greatest possible degree of lightness. The whole front of the cart has been cut away, and a small foot-board substituted, swung by a couple of cords from the pole; on this the occupant, sitting on the floor of the cart,²⁰ rests his feet, his legs passing on either side of the pole. Throughout the Panathenaic series the carts are drawn by horses.

A cart of the same sort, drawn by a yoke of oxen and driven by a seated figure appears as the type of a series of Thracio-Macedonian coins²¹ which belong to a period prior to 480 B.C. One has sides of wickerwork: its wheel, though damaged, appears to be four-spoked. Another has a very clear instance of the cross-bar wheel with a circular axle-head. These carts, however, being drawn by oxen, can hardly be agonistic types. The children's carts common on aryballoi and oinochoai of the later fifth century are also usually of this shape.

So far the travelling cart, though attaining to the religious dignity of taking part in the great games, has appeared almost exclusively as the vehicle of mortals.²² Nevertheless in a somewhat ethericalised form it effects an entrance into two sets of mythological representations, those, namely, which depict Dionysus or Triptolemus setting forth to make known their gifts among men. The war-chariot was inappropriate to these peaceful victors, and rarely occurs except in comparatively late instances: the primitive waggon was unsuitable to journeys of such extent. The travelling cart, which was associated with country life and dignified by its use at the great religious festivals, becomes the vehicle of these two deities. Some of the earlier instances in b. f. art very closely resemble the carts of the Panathenaic amphorae with their wooden sides cut away before the wheel, and their projecting footboards; often again they are impossibly attenuated, being reduced to a seat and a wheel. In the r. f. period they frequently take the form of an elaborate throne on wheels. Ordinarily the wheel is four-spoked, that being the form proper to serious mythological art; but at least one instance occurs of the cross-bar wheel which originally is characteristic of the cart. On an amphora of good b. f. work,²³ Dionysus sets out on a winged cart with a cross-bar wheel; nothing of the structure is shown but the wheel and the supports of the body, two bars which meet in a V-shape above the axle. The wheel is of extremely slender proportions, and the diametric bar is secured against splitting by clamps. On the reverse Triptolemus is setting out in a cart without wings and with an ordinary four-spoked wheel; its sides are of wood with panels of wickerwork.

These light structures appear very far removed from the lumbering

²⁰ On all the coins mentioned the driver sits on a raised seat.

²¹ See *Brit. Mus. Catal. of Coins, Macedon*, p. 150, and B. V. Head, *Coins of the Ancients*,

Pl. v. 7.

²² One of the Messana types has a female charioteer, representing Messana herself.

²³ Pub. Gerhard, *A. V.* 41.

waggon with which we started: but their development from them has been traced through such forms as the carts of the Chalcidic vase and the Munich amphora, and their origin is independent of the spoke-wheeled chariot. Two features characterise the series, and mark the cart off sharply from the chariot. The first is the use of axle-blocks, necessitated by the revolving axle and then used to give height to the frame: the second is the prevalence of the cross-bar wheel, though this tends to be ousted by the spoked form.

The cross-bar wheel is directly derived from the block wheel, and is the outcome of an effort to lighten it: it is much more primitive than the simplest form of spoked wheel. Professor Haddon in *The Study of Man* devotes an interesting chapter to the evolution of the cart, and sketches the gradual modification of the block wheel in various European countries. The simplest form of wheel is the solid disc cut from a tree-stem in which the rectangular end of the axle is inserted; the rest of the axle is rounded to allow of its revolving. Such a wheel and axle are removed but one degree from the solid roller which, with the sledge, is generally accepted as the hypothetical ancestor of the wheeled waggon. The wheel of the Silenus cart is of this type. But such a wheel must always be relatively small, and would be difficult to obtain in countries where timber does not grow to a large size; hence the next step will be to build up a solid wheel out of separate planks secured by cross-bars, as is done by the Basques at the present day. Both the simple and the composite block wheel can be lightened by perforations of various shapes within their circumference, provided that these are not made so large as to weaken seriously the power of resistance of the whole. In the case of the composite block wheel, the process may take the form of removing entire planks, those that remain being secured by a felloe. The cross-bar wheel exhibits the final step of this process, and the modern Cantabrio-Asturian wheel figured by Prof. Haddon, which is practically identical with the ancient Greek wheel, shows clearly how the result was reached. Only two of the primary planks remain, still united by the diametric cross-piece, and the whole is secured by a felloe.

In ancient times, we have found the cross-bar wheel as far east as Cyprus, and as far north as Macedon; it also occurs in Italy, both in prehistoric and in classic times. In a turbarry at Mercurago two wooden wheels were discovered, both belonging to the Bronze Age of Northern Italy. The ruder of the two (Fig. 9) has advanced but little beyond the block-wheel.²⁴ It is formed of three heavy pieces of walnut wood, held together by two curved bars of larch wood embedded in the former: on each side of the axle-hole is a semi-circular opening. Yet it is evident that this wheel is on the way to developing into the cross-bar wheel, and that when the change takes place, the central plank will become the diametric bar, and the larch-wood fasteners the two cross-bars. In the second example the change has actually taken

²⁴ B. Gastaldi, *Lake Habitations and Prehistoric Remains*, etc. Figs. 36 and 37; Montelius,

place. The wheel now consists of a felloe, a diametric bar and two cross-bars, the splayed ends of the diametric bar forming two of the arcs of the felloe, and thus proving its derivation from the central plank of the first specimen. The cross-bar wheel may thus be obtained from the composite block wheel in

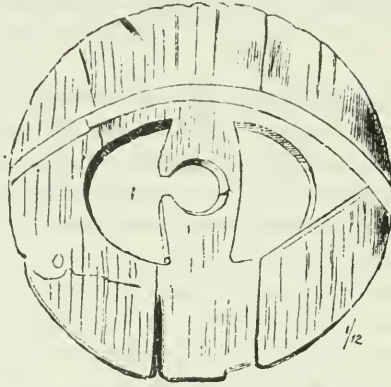


FIG. 9.—WOODEN WHEEL FROM MERCURAGO.
(By permission of the Anthropological Institute.)

two ways, either that just described, or that pointed out by Professor Haddon in the case of the Cantabrian-Asturian wheel already referred to, where the diametric bar is derived from the central cross-piece which held the block wheel together, and the cross-bars from two of the primary planks. It may

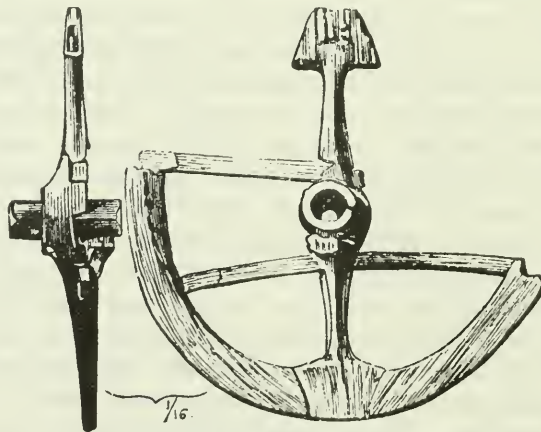


FIG. 10.—WOODEN WHEEL FROM MERCURAGO.
(By permission of the Anthropological Institute.)

be noted that the second wheel is considerably larger than the first, the one being about two, the other about three feet in diameter. The possibility of increasing the size without seriously increasing the weight is the great

advantage of the cross-bar over the block wheel. The fasteners in becoming cross-bars have necessarily taken a new direction. Those of the first wheel curve inwards, those of the second outwards, though only to a very slight degree. Both these wheels have circular axle-holes and may therefore have revolved on fixed axes; the carefully finished cross-bar wheel must certainly have done so. No metal was used in the construction of these wheels.

Greece unfortunately affords no specimen of an actual wheel, but some details of construction may be gathered from vase paintings and models. In several the rectangular axle-head clearly shows that the axle revolved in the primitive manner: they are the wine-cart of the Louvre vase, the car of Dionysus, the carriage of the Corinthian plaque, the lead wheel from Cyprus, and two small bronze wheels found at Olympia.²⁵ A small bronze wheel found in a child's grave in Samos has an oval hole for the axle.²⁶

On the other hand the Cyprus terracotta cart, the mule-cart of the Chalcidian vase, the ox-cart on the Thracian coin, and the racing cart on the Burgon vase have distinctly circular axle-heads, indicating a fixed axle. These are not ordinary farm-carts, which would be slow to adopt such an improvement. The Corinthian plaque already referred to supplies some farther points. As in the *Mercurago* wheel, the ends of the diametric bar are let into the felloe: this method of construction is not found in the case of the chariot wheel, whose felloe is continuous, the spokes at their junction with it being strengthened as a rule by triangular blocks of wood. The ends of the cross-bars seem also to form sections of the felloe. The bands of paint between the ends of the cross-bars perhaps represent clamps put round the felloe to prevent its splitting.

In Italy the cross-bar wheel continued to flourish, for it frequently occurs in Etruscan art of the fifth century. A silver coin of this period has for its type a beautifully clear cross-bar wheel with a heavy diametric bar, a rectangular axle-head secured by a long pin which passes through it, and cross-bars curving outwards, a feature characteristic of the Etruscan form. It appears to have a tyre, and the diametric bar is secured against splitting by four clamps.

On one of the sides of a sarcophagus from Vulci a marriage procession is carved in relief. The wedding coach is precisely similar to the cart of the Munich amphora: the pair sit side by side on the raised seat, jointly supporting a large parasol, and the driver sits at their feet. The wheel has a rectangular axle-head: the two cross-bars are very close together, divided only by the axle, and curve strongly outwards. The body of the cart is raised a good way above the axle, but the means by which this is effected are not clear. Two foot-holds are provided as an assistance in mounting. One is a step hung low in front of the wheel, the other is cut out in the low part of the side.

As the cross-bars of these Etruscan specimens become more and more

²⁵ *Olympia, Die Bronzen*, Pl. xxv.

²⁶ Boehlau, *Aus ion. u. il. Nekr.* Pl. xv. 7.

strongly curved and approach the middle of the wheel, they are very near breaking up each into two spokes radiating from the axle. The form is frequently seen in the ornamental wheels of the bronze fire tongs found in various Italian sites. An Etruscan relief published in the *Wiener Vorlegblätter* ²⁷ shows a wheel in which the final step has been taken. The two cross-bars have met in the middle: the diametric bar has disappeared, and the result is a wheel with four curved spokes.

This is not, however, a genuine evolution of the spoked wheel from a more primitive form. The spoked wheel was of course perfectly familiar to Etruscans of the fifth century, and these modifications of the cross-bar wheel are conscious endeavours to assimilate its form to that of the other. An experiment of the same kind seems to have been made in Greece itself. On three black-figured vases ²⁸ in the British Museum the wheel of the quadriga has this form: and on one cantharus of the severe red-figured period ²⁹ the diametric bar remains, and the two curved cross-bars have nearly, but not quite, met in the centre. In all these cases the quadriga is represented in the three-quarter scheme, and it might be supposed that the curved spokes are the result of faulty perspective: but on another b. f. vase, a quadriga in the same position has an ordinary four-spoked wheel with the spokes correctly drawn. But curiously enough, the cross-bars of the Greek carts are always straight, and there seem to be no instances of chariots with the ordinary cross-bar wheel.

For the origin of an object common to Northern Italy, Thrace, and the mainland of Greece it is natural to look to some Central European locality: positive evidence, however, of the existence of this wheel in that area is lacking. Still the assumption of such an origin would account for its non-appearance in Greece, so far as our knowledge extends, in pre-Hellenic times. It is perhaps worth noticing that the two specimens which are probably the oldest of the series are votive offerings from Olympia, a site whose history only begins with the geometric age. During the classic age it must have been a common object in Greece, though the examples through which it is known to us are so few. The cart itself is a rare object in art, but when it does occur the wheel is almost invariably of this form: ³⁰ and it is certain that this little bit of realism would not have

²⁷ Series B, Pl. VIII. 5.

²⁸ B 252, 254, and 499.

²⁹ E 154.

³⁰ A small bronze model of a cart, found in the cave of Psychro in Crete, has a fixed axle and four-spoked wheels. It is drawn by a pair of oxen, and is of archaic workmanship. The passage on the cart in Hesiod (*Op.* 424-7) unfortunately throws no light on the construction of the wheel. It simply recommends the farmer to 'cut a three-span felloe (or wheel) for a ten-palm cart,' (*τρισπίδαμον δ' ἄψιν τάμνειν δεκάδωρον ἀμάξην*), or, to adopt the explanation

of Proclus and the scholiasts who follow him 'cut a three-span arc for a ten-palm wheel.' Proclus assumes that the wheel is spoked, but his assertion is of no value on a point of archaeology. He may be right in saying that the felloe consisted of four arcs, and in thus getting a circumference approximately equal to three times the ten δῶρα which he takes to be the measure of the diameter. But this has nothing to do with the question of the construction, for the felloe of the cross-bar wheel could equally well consist of four arcs. The whole passage is obscure, for the extraordinary length of seven

found its way into art at all had not the original been very constantly before the eyes of the artist. The Munich amphora and the Corinthian pinax show that for a time at least the cross-bar wheel was not confined to the primitive waggon. Its disappearance was no doubt a gradual process, and had already begun in the fifth century, or even earlier: for the four-spoked wheel has supplanted it not only on the wedding pyxis, but on the black-figured fragment from the Acropolis. These, however, are rather carriages than carts: and the Boeotian vases exhibit the cross-bar as still the ordinary cart-wheel.

It occurs on two or three monuments of later date. An impression of a seal on a clay nodule found at Athens represents the earth goddess half rising from a cart with a cross-bar wheel, and imploring rain with a gesture of entreaty. Professor Furtwängler dates this object to the fourth or third century B.C. A series of coins of Crannon, struck after 400 B.C., have for their type a hydria standing on the rain-making waggon of the city, which is represented by two cross-bar wheels united by an axle. But in these instances the waggon has a religious significance, and the form of the wheel may be due to religious conservatism.

The type, indeed, is not advantageous: it is much less strong than the spoked wheel, owing to the two four-sided spaces which compose its central division. Hence it naturally tends to disappear from the carriage and the racing cart: for increased speed would mean increased friction, and this it could not well support. The great merit of the cross-bar wheel is that of being easy to make and easy to repair, whereas the making of spoke wheels seems to be always a separate industry requiring special skill. This circumstance would, no doubt, help to preserve the cross-bar wheel in the thinly-peopled country districts of Greece, where professional cartwrights must have been rare. But it is surpassed by the block-wheel in strength and simplicity, no less than by the spoke wheel in strength and lightness. The block wheel, the most primitive form of all, is very tenacious of life. It has not long been extinct in Great Britain; it still survives in Ireland and other European countries; it probably never ceased to exist in Greece, and may have contributed to the extinction of the cross-bar wheel in that region. At any rate, while cross-bar and four-spoked wheels have alike disappeared, the block-wheel still flourishes, *solida simplicitate*, in Thessaly.

foet recommended for the axle has never been explained, though Tzetzes calls attention to the difficulty.

The curious scholion by the hand m¹ in the Medicean MS. of Aeschylus, written to explain the word *σύριγγες* in line 188 of the *Septem* seems to refer to a more primitive form of cross-bar wheel, in which the cross-bars were more numerous. This is pointed out by Dr. Verrall in his article 'On the Syrix in the Ancient Chariot,' *J.H.S.* vi. The passage, which is not there quoted in full, runs as follows:—*σύριγγες*

τὰ ξύλα τὰ μέσον τοῦ περιφεροῦς ξύλου τοῦ τροχοῦ διαπεραιούμενα. τὸ μὲν γὰρ αὐτῶν ἐστὶ μέγα, τὸ δὲ ἕτερον μικρότερον, ἄλλο δ' αὖ τοῦ δευτέρου μικρότερον, λόγον τῶν αὐλῶν τῶν συρίγγων ἐπείχοντα.

δεύτερον and ἄλλο cannot refer to the two bars of the ordinary cross-bar wheel, which of course are always of the same size. The evidence of the monuments does not favour the supposition that such a wheel was ever characteristic of the chariot.

The pyxis reproduced on p. 133 was found at Eretria.³¹ It is of unusual size, measuring 16·9 centimetres in diameter, and 8·9 in height, exclusive of the lid. The body is raised on three small feet. The drawing belongs to the fine period, and is not without elegance, though very careless in details.

The design on the lid comprises six human figures, which are divided by Erotes painted in white into three groups of two each. The first of these consists of the bride seated at her toilet, and a maid who hands her a mirror and toilet-box. The bride wears a veil, one corner of which she draws forward with her right hand. The face arms and feet of the attendant are painted white, the only instance on the lid of the use of white for a human figure; evidently the object is to carry up the lines of the white Eros who kneels behind her, arranging the folds of her train. In front of the bride stands the loutrophoros, which frequently appears in bridal scenes; a striding figure is painted on it in black. Behind her chair is a second vase, which, like the loutrophoros, appears in a certain number of representations of weddings, and of which actual specimens are extant. It consists of a round receptacle mounted on a sort of pedestal, and has recently been identified by Dr. Zahn with the *γαμικοὶ λέβητες* of an Eleusinian temple inventory.³² An Eros stands beside this vase, with which he is occupied in some way; on the original lines in relief can be seen passing from his hands to the vase. These are probably the traces of an object now effaced. A clue to its nature is afforded by the vase-painting published by Hartwig in the *Eph. Arch.* 1897, where the companions of the bride are engaged in placing branches of a flowering shrub³³ in the loutrophoros, and in a pair of *γαμικοὶ λέβητες*: probably the Eros was similarly occupied, though the flowers and leaves have been effaced. These vases were afterwards carried to the house of the newly married couple.³⁴

A kline with a cushion on it separates this group from the next, which consists of a young man and a girl standing side by side. The man wears a petasos and sandals, and has a chlamys wrapped round his arm. The girl wears a Doric peplos, and draws forward one corner of the diplois with her left hand; in the right she holds a large fan with a long handle, doubtless to be used as a parasol for the bride in the procession.³⁵ This pair perhaps represents the *πάροχος* and the *νυμφεύτρια*.³⁶ The third group consists of a young man and a woman, both seated. The young man wears a wreath and probably represents the bridegroom.

The principal group on the body of the vase consists of the bride and

³¹ I have to thank M. Stais for kindly giving me permission to publish it.

³² For literature on this subject see Robert, *Arch. Zeit.* 1882; Hartwig, *Ephem. Arch.* 1897; Wolters, 'Vasen aus Menidi' ii. *Jahrb.* 1898. The last named article demonstrates the great antiquity of the type, and its connection with funeral as well as with marriage rites, two further points of resemblance with the loutrophoros.

³³ The flowers, which on the original are clearly given in white and purple paint, are omitted in the reproduction.

³⁴ See Deubner, 'Die Epaulia,' *Jahrb.* 1900.

³⁵ On a vase-painting pub. *Annali*, 1840 N, representing the libation of Oenoians, Hippodameia is led by an attendant who fans her with a similar fan.

³⁶ ἡ συμπεπομένη ὑπὸ τῶν γυνέων τῇ νύμφῃ παράνυμφος. Hesychius.

bridegroom in their wedding coach, which has been already described. In front of the servant who leads the horses walks a girl carrying some object in her hands: behind the carriage there is a woman with a torch in each hand, and behind her again a young man on horseback wearing a chlamys. The rest of the space is filled up with stock figures, which have no connection with each other or with the main subject: there are three seated and two standing male figures, two maids, and two Erotes.

The best literary parallel to this scene is afforded by the well-known passage in the fragmentary second oration of Hyperides, which describes a wedding procession in the following terms: ἀνάγκη γὰρ, ὃ ἄνδρες δικασταί, πρῶτον μὲν ὄρεοκόμον καὶ προηγγητὴν ἀκολουθεῖν τῷ ζεύγει ὃ ἦγε τὴν γυναῖκα, ἔπειτα δὲ παῖδας τοὺς προπέμποντας αὐτὴν ἀκολουθεῖν. The ὄρεοκόμος or coachman walks at the heads of the horses, and the mounted man behind probably represents the παῖδες. The προηγγητής or figure with a herald's wand frequently represented at the head of wedding processions, does not appear on the vase; and the πάροχος is omitted alike from the description and the painting. The horseman is a rare figure, but is found on the fragment of an epinetron published, together with a conjectural restoration, in the *Wiener Vorlegeblätter*, 1888, Pl. viii. All that remains of the original is part of a low cart in which the bridegroom and bride are seated side by side, and a young man on horseback, who comes immediately behind them. The resemblance to the scene on the pyxis is very striking.

A wall-painting representing the marriage of Bacchus and Ariadne,³⁷ which was recently discovered at Pompeii, gives the ordinary figures of a Greek wedding procession in a mythological dress. A kline has been placed on a waggon drawn by a pair of oxen, and on this Bacchus and Ariadne recline. On the right a couple of Maenads represent the female attendants of the bride, on the left two satyrs, one mounted on a mule or donkey, replace the horseman of the pyxis.

H. L. LORIMER.

³⁷ See Mau, *Ausgr. v. Pompeii, Röm. Mitth.*, xvi. p. 342.

THE BRONZE STATUE FROM CERIGOTTO.¹

[PLATES VIII., IX.]

IN February, 1901, M. Kabbadias very courteously sent to the Society for the Promotion of Hellenic Studies, of which he is an honorary member, some photographs and a brief description of the remarkable series of bronze and marble statues found in the sea off the north coast of Cerigotto. In view of the great interest that had been excited by this discovery, M. Kabbadias' communications were at once laid before the Society at an open meeting, and were also published in this Journal.² But the fragmentary state of the figures and the corrosion of their surface prevented the possibility of any final judgment as to their general effect or the details of their modelling. If this was the feeling even of those who had seen the originals, it was far more so with those who could only judge from somewhat unsatisfactory photographs of them; and such opinions on them as were expressed at the time would be admitted by the authors to be subject to revision in the light of a more complete and careful study. A certain amount of misunderstanding was due to the general interest taken in the discovery, and the consequent demand for some authoritative and generally intelligible information about it³; for example, the claim put forward by M. Kabbadias for the Cerigotto statue 'to rank as high among statues of bronze as does the Hermes of Praxiteles among those of marble' probably led to its comparison with that masterpiece, to which its resemblance is only superficial.

The study of the Cerigotto bronze has now entered on a new phase, with the completion of its cleaning and restoration, and with its publication by M. Kabbadias in the *'Εφημερίς Ἀρχαιολογική* for 1902, p. 145, and Plates 7-12. Under these circumstances it has been thought that a new reproduction,⁴ together with a brief note on the statue as now exhibited, would be welcome to the readers of this Journal.

¹ The modern Greek official name of the island is Antikythera—apparently a recent coinage. The ancient name is Aegila or Ogylos, the local modern name Singilio.

² xxi., 1901, p. 205.

³ I have not thought it necessary to refer in detail to the earlier theories; some were base-

less or untenable, some have already been withdrawn by their authors. It was really impossible to form any clear opinion before the statue was cleaned and put together.

⁴ The photographs reproduced in Pl. VIII., IX. were kindly supplied by Mr. Bosanquet.

M. Kabbadias gives a complete account of the external evidence as to the statue—of the circumstances of its discovery by divers, of the other statues in bronze and marble found with it, of the ship and its furniture. All this evidence goes to show that the shipwreck must have occurred some time in the first or second century before our era, a date confirmed by the character of the pottery found among the contents of the ship. There is, therefore, much probability in the conjecture made by M. Kabbadias at the first discovery, that the ship was carrying a cargo of the spoils of Greece to Rome; but there is no confirmation of its suggested identity with the ship with part of Sulla's plunder which was lost off Malea; indeed, that ship would probably have had a richer burden. The various statues found are of a very miscellaneous character—mostly, so far as they can be dated, of the Hellenistic age. But it is impossible to draw any inference from the whole collection as to any one statue belonging to it, except that the circumstances seem to preclude the possibility of any of them being much later than the beginning of the Graeco-Roman age. No earlier limit can be fixed, for it is evident that any statue—of the fifth or fourth century, or even earlier—might find its way into such a mass of various plunder.

Each of the statues found, and among them the life-size bronze figure which is reproduced in our plates, must then be judged entirely on internal evidence, from a study of its style and its subject. Before we consider these, it will be as well to add a few words on the question of the cleaning and restoration which it has undergone. In the process of cleaning the bronze, the expert assistance of M. Rhousopoulos, Professor of Chemistry in the University of Athens, was called in. He adopted a method similar to that which had been applied to the Acropolis bronzes,⁶ and with a similar result. The patina has been entirely destroyed, and the surface of the bronze is now almost black. This may have been necessary for the cleaning and preservation of the statue, and without special knowledge as to its condition and the chemical or other processes that had to be employed, it is impossible to criticise fairly what has been done; but one may be permitted to regret, from the artistic point of view, the necessity for such measures. The restoration of the statue—that is to say, its mounting in an erect position, and the filling up of the cracks and gaps that still remained after the extant fragments had been pieced together—has been entrusted to M. André, who was summoned from France for the purpose. He has done his work skilfully; but the restored portions have been made indistinguishable in colour and texture from what remains of the original. - The amount of restoration necessary can be seen in a photograph published by M. Kabbadias; it amounts only to some small portions, chiefly below the neck and in the front of the thorax and abdomen. It would have been easy, by a slight difference in colour, to have made the restorations distinguishable; this would have been a help to the student, and would, in the case of the general public, have removed a certain feeling of uneasiness, the lack of confidence in a statue known

⁶ See *J.H.S.*, x., p. 275.

to be restored to some indefinite extent. As a matter of fact, the extant fragments adjoining the gaps leave little room for doubt as to the correct restoration of the added portions. The general form of the abdominal muscles is not doubtful—a fact of importance, in view of the peculiar character of their modelling.

When the statue was first found it was confidently claimed as an original of the fourth century. Those who could only see it a small piece at a time in or out of its bath of acid did not feel competent to express any criticism of this opinion, though the details of the modelling, especially in the arm and hand, aroused some doubts as to its correctness. Now that one can see the whole statue, set up in the Museum at Athens, or examine the series of photographs that is now accessible, I think there is a fairly general feeling among archæologists that it is no longer possible to regard the statue as an original of the fourth century. I do not propose, in the space and time now available, to make any attempt to assign the statue finally to its date and school; but merely to give a brief indication of the reasons that induce me as well as others to assign it to the Hellenistic rather than the Hellenic period.

Let us consider first the type of the head, the only part that could be appreciated before the statue was pieced together, though its surface was obscured by corrosion. The question of its resemblance to the *Hermes of Praxiteles* has already been touched upon; such resemblance as there is consists mainly in the physical type represented, and so far might be considered as an indication of Attic origin. There is very little artistic affinity with the style of *Praxiteles*; there is no trace of the fine sweep of the lines of the brow away towards the temples that is characteristic of *Praxitelean* heads; the nose, as compared with that of the *Hermes*, lacks distinction of shape, and the mouth is small and weak. The head has also been compared with a class commonly attributed to *Scopas*, a class including the *Lansdowne House Heracles* among others⁶; but the resemblance here also appears to be superficial rather than essential. The hair, indeed, is very similar—so similar as to suggest imitation, especially in the little locks standing erect above the forehead; the eyes, also, are set in deep shadow, and there is a heavy overhanging mass of flesh below the brow, as in the *Scopas* heads. But the resultant expression is totally different; there is nothing of the passionate, far-away look that is characteristic of *Scopas*; and it is impossible to imagine a greater contrast with the dilated nostril and half open, panting lips of *Scopas* than is offered by the nose and mouth of the *Cerigotto* statue. The slight and graceful proportions of the face—all the more conspicuous for their contrast with the heavy torso—are also unlike the massive proportions of *Scopas*. It would be easy to carry these comparisons further; but the impression may be summed up in imitation of a well-known saying—there is something of *Praxiteles* and *Scopas* in the

⁶ I regret that I was prevented from hearing read before the Hellenic Society.
Dr. Waldstein on this matter, in his paper

head, but little that is either Praxitelean or Scopaeic. To put it in another way, it is not the work of a contemporary of those masters, but of a later imitator; and of an imitator with the eclectic taste that marks the Hellenistic age.

When we come to consider the limbs and torso, the Hellenistic character of the work asserts itself even more emphatically. The muscles of the torso, and especially those of the abdomen, are very heavy, and out of keeping with the rather slight proportions of head and limbs; they betray the anatomist in their laboured modelling, and contrast with the free and rapid observation of living nature that gives so great a charm to the work of the fifth and fourth centuries. The modelling and surface treatment of the limbs, especially of the outstretched right arm and hand, are such as of themselves to cast doubt on the possibility of a fourth century origin. The uncouth realism in the rendering of the sinews of the arm and the skin of the hand might have occurred in an archaic statue; but such work does not recur until late in the Hellenistic period.

It is, however, above all the general effect and pose of the statue that give the first impression of the lateness of its date. There is a lack of simplicity, a seeking after theatrical effect, that is obvious at the first glance, and that still makes itself felt after a longer study.⁷ It is perhaps unfair to make this statement without expressing an opinion as to the subject and the action of the statue: but the mere fact that, although its action is apparently so distinctive, so much controversy has been possible as to its meaning, suffices to some extent to justify the charge; one may remember the analogy of the Aphrodite of Melos, itself a fine work of the Hellenistic age. The object of which the handle is visible in the left hand may be a strigil, held ready for use; but the statue is certainly not an apoxyomenos in the act of scraping himself; in that case the peculiar action of the right arm would have no meaning; it is not merely stretched out, as is sometimes the case with athletes holding strigils, as depicted on vases, but is held up in a constrained position, evidently for some definite purpose. What that purpose was it is impossible to say; the object once held between the two fingers and the thumb of the right hand must have been approximately spherical. It is inconceivable, even in a Hellenistic work, that an athlete should hold out an oil-flask in such a manner, nor does the action fit the notion of holding out an apple or some such object. Perhaps the impression most obvious to a spectator is that the statue is holding out some object in the direction of the goal on which his eyes are fixed, and so possibly is taking aim; but even for this the action is not very appropriate; nor have we any record of an athletic contest consisting in throwing a ball at a mark. Another possible suggestion—perhaps the most probable—is that the statue represents an athlete in the act of catching a ball that has been thrown to him; if so, however, it must

The photographs, being taken with a wide-angled lens from too close, exaggerate the awkwardness of the pose; but even in the original it is felt.

be admitted that his pose is somewhat affected, and ill suited to the action. But, whatever be the interpretation, it can hardly be disputed that the centre of interest and so of composition is outside the statue itself; there is, in short, a deficiency of that *αὐτάρκεια* which is a quality rarely if ever absent from statues of the fifth and fourth centuries, though often enough violated by the dramatic and sensational work of Hellenistic sculptors.

All these considerations lead us to the conclusion that the Cerigotto bronze is a statue, probably of an athlete in a somewhat theatrical pose, dating from the Hellenistic age; and showing in its execution the eclectic character, the combination of mannerisms copied from earlier artists with anatomical study and realism in details, which is often to be seen in works of that period. A more careful study and comparison may probably lead to a closer definition of its date and school; but this it is perhaps wiser not to attempt at present.

In conclusion, it is well to guard against any depreciation of the high artistic value of the new bronze statue. If the present short study has been devoted to pointing out its defects rather than its excellences, this is because the former are what distinguish it from others and so enable us to assign its date, while the latter are what it probably shared with a countless number of fine bronze statues that have now been destroyed. As a bronze original of Greek, even if of later Greek workmanship, its value both to the artist and to the archaeologist cannot easily be exaggerated, and even the claims that were made for it on its first discovery were hardly excessive.

E. A. GARDNER.

THE POTTERY OF KNOSSOS.

[PLATES IV.—VII.]

IN the first provisional reports of the Excavations in the Palace at Knossos, published by Mr. Evans after each season's work, the general accounts of the distribution and stratification of the pottery play a part in accordance with the importance of this kind of evidence in its bearing on the history of the site.¹ From these accounts it will be seen that there exist on the Palace Site of Knossos and its neighbourhood three distinct strata of deposit.

I. A prehistoric, neolithic stratum, first of all verified in the preliminary pits on the E. slope of the Knossos Hill and successively afterwards in the W. and N.E. regions of the site, then in test-pits sunk within the palace boundaries in the region N. of the S. Propylaea in the Central Court, in the Third Magazine and in the West Court. These test-pits all reached a depth of from seven to eight metres before virgin soil was reached. This gives a thickness of neolithic deposit starting from the virgin soil and extending upwards to the beginnings of the painted series averaging about six metres. This formidable depth of pure neolithic deposit is very much greater than any yet verified in the Aegean region, and in its gradual formation is in itself evidence both of the extreme longevity and of the unbroken continuity of development of the civilization represented by it.²

II. Beginning already with the latest neolithic stratum, we have the first appearance of painted Cretan ware, verified in different phases at different points in deposit, found superimposed upon the full neolithic and, where undisturbed, underlying the later deposit of the palace and of its neighbourhood.³ This includes what may be termed the Early and Middle Minoan classes.

III. Last of all comes a 'late Minoan' stratum, represented all over the

¹ *B.S.A.* vi. vii. viii. This paper has been written at the request of Mr. A. J. Evans.

² See *ib.* vi. 6-7, where the general characteristics of the neolithic deposit are described.

³ *Id.* 7 vii. 5 viii. The excavations of Mr.

Hogarth on parts of the city site afford further evidence of the wide distribution at Knossos of Minoan ware of the best period. See Hogarth-Welch in *J.H.S.* xxi. 78-98. Pla. vi. vii.

palace region down to the floor-levels and outside all over the city site next the surface in regions where there is no later deposit. The later phase of this class covers the fabrics elsewhere described as Mycenaean.

I.—*The Pottery of the Neolithic Period.*

For data of the neolithic deposit of pottery it will be convenient to rely chiefly on the results obtained by means of the test-pits sunk in the W. Court from the surface, and in the Third Magazine from the floor of the latter downwards. In both these cases the pottery and other finds from successive metres were kept apart and put into separate bags. As in the W. Court test-pit, sunk as it was from the surface, the series is complete, it will be advisable to take that as our standard, at the same time keeping the results of the other test-pit in view for comparison.

1. The earliest pottery of Knossos, that which was found in the deepest metre just above the depositless virgin soil, was in the case of both test-pits hand-made and more or less burnished. But it was significant of the very early character of the ware that in neither case were there any incised fragments—in the W. Square test-pit there were in this first metre 168 fragments of which none were incised, in the pit of the Third Magazî out of 44 fragments none were incised. From this fact, one cannot, however, with absolute certainty conclude that at this early period at Knossos no pottery was incised, but at any rate we can be sure that the very earliest pottery of all, as represented next the virgin soil, was as a whole unincised, and that throughout the period, which may have been a long one, represented by the deposit in question the decoration of pottery by means of incised lines must have been in its beginnings. The fragments were of common household vessels. There were rims and handles of pots, rims of basins, bowls and plates as well as many pieces fractured all round, from which the forms of the vessels to which they belonged could not with certainty be judged. All the fragments have a sooty grey, imperfectly sifted clay, which in the case of the coarser kinds of ware is impregnated with sand particles or pounded stone dust. There is, of course, at this early period no trace of potters' oven or wheel. The vessels being wide-mouthed, they are usually hand-polished both inside and out. There are, as yet, no narrowed necks and no organically differentiated bases, but only perfectly simple flat bottoms without ring or foot.

In Crete neither at Knossos nor anywhere else in the island, so far as known, have tombs been discovered with ware corresponding to this earliest domestic ware found in the deposit immediately above the virgin soil underlying the palace of Knossos and its precincts.

That this primitive deposit was practically uniform for a considerable depth was shown by the fact that in the second metre from the bottom in both pits the pottery—rough pots, jars and basins and finer bowls, saucers and plates—was identical with that in the first metre. In this metre incised

ware appeared for the first time, but in almost inappreciable quantity—in the Third Magazine out of a total of 164 fragments, two were incised, while in the W. Court test-pit out of a total of 204 sherds none were incised. Once the incised ware has begun to appear we find that from this level upwards its presence, in a slowly increasing, though always small percentage, is constant. Thus, the third metre yielded from one to two per cent. of incised ware, the fourth metre about three per cent. In view of these data, it may be considered that the deposit of the third and fourth metres represents the first stage in the incision of neolithic ware.

2. With the fifth metre we enter upon a new phase of development. Here the proportion of incised fragments is still only from two to three per cent. but we become conscious of an important innovation when we notice that almost all the incised fragments have traces of white-filling—in the fifth metre of the test-pit in the Third Magazine, out of 524 fragments, 18 happened to be incised, and of these almost all showed the incisions filled with a kind of white chalk. Here we are no longer at the primitive stage represented by unincised, and the early tentative experiments in incised pottery. With the first use of a colour-pigment producing a light design on a dark ground, we have the inauguration of a new style destined to have a long history. The use of white-filling is in the course of time sure to suggest the use of similar colour on the flat to produce geometric effects outwardly similar to those produced by white-filled incised designs. It is, however, noticeable that no such use of colour on the flat ever occurs in the neolithic deposit of Knossos at all.

The circumstances in which the white-filling occurs elsewhere afford indication that over a wide field the technique marks an advance on the pottery of the more primitive period. Thus the pottery with white-filling from Troy must now be assigned to the same general context as the similar pottery from Knossos.⁴ Fresh important data are also forthcoming from Egypt in the shape of similar ware found in circumstances which show that it must be an importation. If, as is probable, the importation was from the Aegean, then the ware in question must come into the same context as that from Crete.⁵ The Egyptian finds are of special importance as affording chronological evidence, in complete accordance with that from Knossos, as to the probable time-limits within which the pottery in question continued in vogue. That this period was a long one is shown both by the depth of deposit at Knossos, and by the time covered by the tombs in which the pottery with white-filled incisions occurred in Egypt.

Equally important is it, however, to observe that not only the incised but also the finer kinds of unincised hand-polished wares have now entered on a new stage of development. Already in the primitive period we find the potter striving in the case of the finer varieties of vessels to give an ever

⁴ Incised pottery with the incisions filled with white is found at Troy to belong already to the period represented by the First stratum.

See *Troja und Ilion* i. 251.

⁵ *Diospolis Parva. The Cemeteries of Abadiyeh and Ilu*, 1901. 14.

greater degree of lustre to a surface which becomes more and more uniformly black as time goes on. The finer kinds of ware, both incised and unincised increase in quantity and improve in quality in this second or geometric period. In the case of the unincised fragments, however, the new phase of development is characterised by the fact that once the greatest possible amount of sheen has been obtained, it is now apparently sought still more to heighten the glitter by finely rippling or undulating the surface. Before the vessel was fired, the point of some blunt instrument, probably of bone, was evidently passed vertically from the rim downwards all round so as to produce minute waved rills similar to ripples on the surface of water. On the surface so rippled having been finally burnished the effect is produced which is seen on Pl. IV, 6-14.

The ware with rippled surface, once it came into vogue, had a long history. At Knossos it survives throughout the whole neolithic period from the time of its first appearance. In the succeeding period again we find a survival or reminiscence of the style in a new medium—lustrous brown-black glaze on a buff clay-slip ground. On Pl. IV, 6-14 are the specimens of neolithic fragments with the rippled surface referred to. The first row of fragments, 1-5, shows the later, painted imitations of this ripple motive. The close resemblance of the later painted imitation to the burnished prototype is at once apparent. Of the 'Mycenaean' motive we shall come to speak later. Suffice it here to point out the curious fact that the later painted decoration is most frequently to be found on vessels that are themselves imitations of a metal prototype. Typical is a kind of large one-handled cup, itself a variety of the Vaphio type. In later Mycenaean times all reminiscence of prototype becomes lost and we find the system of decoration applied in the case of vessels, such as common rounded bowls and cups, that probably never had originals in metal.

The actual proportions show that, once this motive came into use, it was fully as popular as the incision of the pottery itself. In the fifth metre in the W. Square test-pit out of 106 fragments 2 were incised and 2 had the rippled surface. In the sixth metre we find the motive fully in vogue and a powerful rival to incision, for out of 186 fragments only 3 are incised while 25 have got the rippled surface. That this rippling of the surface was regarded as decorative is apparent from the fact that out of 12 rim fragments among the 25 rippled sherds 2 have got the rippling also on the inside of the out-turned rim, and of the 2, one has got the rippling omitted on the less noticeable corresponding outside of its wide out-turned rim.

At this high level we already have indications that we are near the end of the neolithic series. In the Third Magazine in the sixth metre among the rim-fragments were several of cups which are prototypes in form of the typical painted Kamares cups of the immediately succeeding period. One fragment of the bottom with part of the side of such a cup, shown Pl. IV, 18, was remarkable for the careful levigation of its grey-coloured clay, its thinness of section and the brilliant almost glaze-like lustre of its fine black hand-polished surface. In the corresponding metre in the W. Court test-pit 2 fragments of common painted hand-made Kamares cups actually occur.

With the seventh metre from the virgin soil the deposit of the test-pit in the Third Magazine comes to an end just at the floor-level of the palace. The formidable depth of the Knossos deposit as a whole will be best realized if we remember that to these seven metres have to be added the two-and-half metres of palace deposit above the floor already excavated before the pit was sunk. As the intervening 'Kamares' deposit not represented in the test-pit was apparently removed in the process of levelling away the top of the hill which we know preceded the laying of the foundations of the palace, we can safely reckon the entire deposit at this central part of the site as representing a depth of 10-11 metres. The pottery of this seventh metre in the Third Magazine still belongs to the matured and best neolithic time. Here out of 56 fragments 6 were incised, and the continued popularity of the rippled ware was shown by the fact that 7 fragments had the rippled surface. Of the incised fragments two were remarkable as representing a twig with leaves on each side. In the one case the stem was rendered by means of an incised line, in the other case by a ridge or relief-line. On each side of the stem was a row of small oblong punctuated points which were filled out with white chalk. Considering that here in the mature neolithic period, in a style that is essentially geometric, we already have attempts at the rendering of plant-motives we need not be surprised to find such motives recurring later right at the beginning of the painted series.

The fragments incised and those with rippled surface reproduced on Pl. IV. give some idea of the kind of ware in vogue in this mature neolithic period. Even from the fragments it is apparent that the great majority of finer sherds are of bowls and cups, and here again we have an anticipation of some of the predominant forms of the succeeding period with whose predilection for bowl and especially cup-forms, we shall become acquainted later. The fragmentary condition of all this enormous mass of pottery Knossos has in common with all inhabited neolithic sites as distinguished from tomb-deposits. No accurate inventory of forms is possible until a sufficient number of representative neolithic tombs have been opened in Crete.

3. In taking leave of the deposit from the test-pit in the Third Magazine we do not yet take leave of the neolithic series, for the deposit of the test-pit in the W. Court, unlike that of the other, is continuous to the surface. We have already seen that here two fragments of common painted 'Kamares' cups were found in the sixth metre. This is in itself an indication that at this level there comes to be a discrepancy between the deposit of the one pit and that of the other. In the seventh metre in the W. Court test-pit there were 667 fragments in all and of these only 97 were neolithic. Of these again none were incised and none had the rippled surface so characteristic of the mature neolithic period. We are here already in the age of decline, whereas with the deposit of the seventh metre in the test-pit of the Third Magazine neolithic pottery is still seen at its best. The explanation is that the formation of deposit was more rapid and accordingly greater in quantity, especially at the best neolithic period, at the centre of the Knossos Hill than towards the periphery. Thus we have actually found that the greater the

distance from this centre the shallower the deposit—with the eighth metre the deposit of the W. Court test-pit comes to the surface, the total deposit in the region of the Third Magazine only comes to an end with the tenth and eleventh metre.

If we try to find the cause of the somewhat sudden decline noticeable in the deposit of the seventh metre of the W. Court test-pit, we shall not be too far wrong if we attribute it to the inauguration of the new paint-media; and in point of fact out of the total of 667 fragments, while only 97 were neolithic, 289 were painted, and of these at least 31 were direct imitations, in a more or less lustrous black varnish surface, of the hand-polished neolithic wares. We cannot, it is true, be quite certain that because at this level hand-polished and painted fragments occurred in the same deposit they are absolutely contemporary in date; yet just at the end of the neolithic time it is reasonable to conclude that there must have been a real overlapping of the two techniques, the old and new, corresponding to the actual overlapping noticeable in the deposit. In this case it would have been the neolithic people themselves who inaugurated the change, and the fact would thus be accounted for that the highest stage of development is noticeable near the end of the neolithic series, and that there is no sign of a falling off in power previous to the time when the paint-technique was invented.

We have already mentioned that certain neolithic forms anticipate favourite ones in the early painted series, also that certain motives, such as the rippled surface, actually survived with a new lease of life in the new medium of lustrous glaze. Such facts are, however, particular incidents in the most fundamental fact of all, namely, that the at first almost lustreless but increasingly more and more lustrous black glaze slip, that now appears for the first time in the same deposit as the latest neolithic fabrics, is a direct imitation of the black hand-polished neolithic surfaces, and that the white painted on this may probably prove to be even chemically the same pigment as the neolithic chalk, just as it is used to produce the same decorative effect of pale design on a dark ground.⁶

That the story told by the deposit of the seventh metre is a consistent one is shown by the fact that in the eighth metre also out of a total of 532 fragments 79 belonged to the neolithic series while of the others no fewer than 198 were painted, 69 of these being of the typical Kamares cup.

We thus take leave of the neolithic fabrics right at the threshold of the great period inaugurated with the first appearance of lustrous and lustreless paints. The great depth of the deposit whose contents we have examined is in itself a guarantee of a very long history. The evidence afforded by the deposit is in this respect in harmony with what has been found elsewhere in the Aegean itself, and also with recent discoveries further afield, more particularly in Egypt. If as is probable the view is right that the early Aegean people are one in origin with the Libyan race of prehistoric

⁶ The neolithic white pigment is according to Virchow 'bald krystallinischer, bald kohlen-saurer Kalk.' *Zeitschr. für Ethnol.* 1883, 451.

Egypt, then it is likely that the beginnings of the two civilizations—the Aegean and the Libyo-Egyptian—are more or less synchronous. The beginnings of the prehistoric Libyan civilization of Egypt have, however, been found, as a result of the recent researches referred to, to go back to a remote pre-dynastic period. Petrie suggests the era about 7000 B.C. as the probable time when the Libyan race made its first appearance in the Nile-valley. It is also probable that while this Libyan race was developing its black-topped style of pottery in Egypt the allied neolithic people of the Aegean, in a wider European context, were creating the peculiar style of black hand-polished ware typical, for that early period, of the Aegean. Well on in this neolithic epoch must come the Egyptian-looking black-topped ware found in copper-age tombs in Cyprus, whose significance in this connection was first pointed out by Furtwängler (*Antike Gemmen*, iii. 22) as being a new indication of race connection between the Egypt and the East Mediterranean of that period, and of a northward movement of the Libyan race of Egypt consequent upon and caused by the first appearance of the Egyptians proper in the Nile-land. If, as is likely, this northward movement began before the Aegean civilization had attained to such consistency in itself and such influence outwards as could have had any definite echo in Egypt, then we should have sufficient explanation of the fact that of imported remains in Egypt none from the Aegean region go back to this early period. Thus the imported black hand-polished ware with incised pattern filled with white, found in the cemeteries of Abadiyeh and Hu, all clearly belongs to a later period in this neolithic epoch, that inaugurated by the use of geometric white-filled incised design on the dark hand-polished ground in the Aegean region and its European and Asiatic periphery. The earliest of this more advanced class of neolithic ware goes back to the latter half of the pre-dynastic period. In Egypt, again, it is also found in dynastic times in its genuine neolithic character in tombs of the Ist., the IIIrd., and apparently the XIIth. Dynasties.⁷ At Knossos this advanced neolithic ware is still found at its best, as we have seen, almost at the very end of the series, just at the time-point when varnish and paint made their first appearance. This must have been during the time of the last Dynasties preceding the XIIth., for by the time of the XIIth. Dynasty the use of varnish and colour is proved by the imported Cretan pottery found in Egypt itself to have already become developed into an elaborate polychrome style.⁸ Thus also Tsountas, 'Εφ. 'Αρχ. 1898, 204, gave a somewhat belated chronology when he suggested the latter half of the third millennium B.C. for the culmination of the Cycladic civilization. It had probably reached its decline by that time.

If we compare the neolithic ware of the mature period from Knossos (Pl. IV, especially the fragments with punctuated bands and vandykes) with the imported pottery found in Egypt (*Diospolis Parva*, Pls. Frontispiece, Class N. II. XIV, *Nagada*: XXX), it will be at once apparent that the two wares

⁷ *Diospolis Parva*, 14.

⁸ Petrie in *J.H.S.* xi. 275--6. Pl. xiv.

come into the same context. If this pottery came from the Aegean then it has certainly more analogy with the mature neolithic pottery of Knossos than with that of any other known Aegean site. The only disturbing fact is that Petrie reports similar pottery from 'pan-graves' of Libyans in the XIIIth. Dynasty and on to the XVIIth. and XVIIIth. At Knossos all the evidence goes against the possibility that such ware continued to be produced there even as late as the XIIth. Dynasty. And the actual Cretan ware above referred to found in Egypt in deposit belonging to the period of the XIIth. Dynasty affords proof that by that period the potters of Knossos had already developed an elaborate polychrome style of pottery.⁹ Further the evidence from the test-pit deposits of Knossos goes to show that this painted style must have been created considerably before that period. Thus the conclusion about the black incised pottery found by Petrie in XIIIth. XVIIth. and XVIIIth. Dynasty tombs in Egypt is that it cannot be from Crete or the Aegean itself at all, but from some outlying peripheral region where, as at Troy, the Anatolian, and probably the Libyo-African coast-lands, black incised and unincised ware continued in vogue long after a painted style had been created in the Aegean.¹⁰

On the other hand the ware of this late neolithic period has analogies with the pottery of the cist-cemeteries of the Cyclades which indicate that both are contemporary appearances. The articulation of typical vase-forms in both cases goes back to early metal shapes which are themselves an indication that the genuine neolithic stage of development is now being left behind. Equally characteristic in both cases is the direct relation of antecedence to the first inauguration of painted design which marks the commencement of a new era equally in Crete and in the Cyclades. In Crete as in the Cyclades the first stage in the new development is marked by an imitation in paint of the incised schemes of decoration inherited from the neolithic period. This imitation involves an initial contemporaneity of the late incised with the early painted schemes of decoration which is fully borne out by the discoveries both in the Cyclades and in Crete. In the later phases of this geometric development the neolithic technique of incision is found to have fallen into disuse.

II.—*The Pottery of the Minoan Period.*

1. Right at the beginning of the painted series we have to start with the fact mentioned already that a certain proportion (31 out of 289) of the

⁹ Petrie, *Kahun and Gurob*. Pl. 27, *Illahun Kahun and Gurob*, Pl. I. *J.H.S.* xi. Pl. xiv, 5—10.

¹⁰ The use of the potter's wheel and oven at Troy as early as the second period represented in the Second stratum of itself excludes the whole of the neolithic looking pottery of this stratum from the genuine neolithic series and assigns it to a post-neolithic date. See *Troja und Ilion*, 254.

When the great prehistoric mounds of Kolophon and elsewhere in the Anatolian coast-region have come to be systematically explored, the analogy with prehistoric Troy in this respect will probably turn out to be complete. The results of exploration in the Libyo-African coast-lands may similarly prove to be in harmony with the 'neolithic' evidence from XIIIth. XVIIth. and XVIIIth. Dynasty tombs in Egypt.

painted fragments that occurred in the same deposit as the latest neolithic sherds was a direct imitation of the black hand-polished ware itself. It is important now to put on record the further fact that the painted fragments above referred to, like all the neolithic fabrics, were themselves hand-made. The clay, however, is now of a terracotta or brick colour in contrast to the peaty grey of the neolithic wares. The finer varieties have their clay carefully sifted, and the fragments when dropped give a clink like that of 'Mycenaean' ware. This latter feature in combination with the brick colour of the clay affords an indication that now the potter's oven, not in evidence for the previous period, is already in use.

Two technical characteristics are observable. 1. The imitation of the black hand-polished ware, which at the same time is the primary differentiating feature of the painted series, consists in the use of a more or less lustrous black glaze medium as a slip spread over the surface of the clay—on both sides usually if the vessel is of wide open shape, on the outside only if the vessel has a narrowed neck—to produce a general effect similar to that of the neolithic black hand-polished surface. The coarser fragments often have the varnish almost lustreless, the surfaces of the finer fragments are apparently more favourable to the preservation of the glaze lustre. On a certain number of fragments with this medium broad bands in lustreless cream-white, possibly the old chalk medium, appear on the dark glaze ground. On these early painted fragments the design-colour as in the neolithic inlays is white and more rarely vermilion. We have thus here, right at the beginning of the painted series, the first rudiments of the Minoan style with light design on a dark ground. 2. Alongside of these fragments occurs another class equally hand-made and with perfectly similar clay, in which the glaze medium is taken as the design-colour in the shape of bands appearing black on the buff ground of the clay. Here then we have equally right at the beginning of the painted series what is usually regarded as the characteristically 'Mycenaean' technique with lustrous dark design on a pale ground.

The synchronous origin of the two styles—light design on a dark ground and dark design on a light ground—is a fact of superlative importance in its bearing on the question as to the origin of the later 'Mycenaean' style. In Furtwängler and Loeschke's classification, *Myk. Vasen* vi.-viii., wares with 'mattmalerei' are set down at the beginning of the painted series and as on the whole earlier than those with lustrous paint. In the class of vases with glaze again those of the first style with light design on a dark ground are regarded as on the whole earlier than those of the second style with dark design on a light ground. At Knossos, as we shall see, the two latter styles originate together and alongside of the first use of lustreless design-colours on the flat, for in Crete all colours except the lustrous glaze medium itself are lustreless. Here then there does not exist a style of pure 'mattmalerei' antedating a period when the lustrous glaze medium itself came into use. Neither, properly speaking, is there such a style contemporary with the styles in glaze. The truth rather is that in Crete at this period we

have two glaze styles contemporary with each other and at the same time contemporary with a style in lustreless colours, not in Crete itself but in the rest of the Aegean and the adjoining Greek mainland.

The original relation of the two styles to each other can best be understood by examination of a class of vessels richly represented in this layer—we mean the common painted ‘Kamares’ cups already referred to and illustrated in Fig. 1 (those in rouleaux below) along with other types of vases belonging to the same context. Out of the 667 fragments of the seventh metre W. Court test-pit, 86 were of the particular kind of cup referred to. These cups, in contradistinction to the common unpainted ‘Mycenaean’ cups of a later period, have along with their paint decoration a deep high shape. The cups have either a flattened bottom (32 specimens) or they have a short rolled-out ring-foot (54). Sometimes the foot is merely pinched out sharp (7). It is characteristic of many of the variety without foot that the lower part of the cup is got into the desired narrowed shape by being pared vertically all round the base before firing with some sharp instrument. Thus some (6) of the cups have a rough polygonal contour below. A later plain variety has then the lower part pinched out into a variation of the polygonal contour by means of the five finger-tips, after which the bottom is flattened out and widened into a foot. Of the footless cups 19 bottom-fragments have a slightly lustrous brown-black glaze slip on which has to be assumed round the rim a broad band in lustreless cream-white. That is to say, we have here the rudiments of technique 1 in its simplest form. Of the footless cups once more, 13 showed the buff ground of the clay, on which has to be assumed above round the rim a broad band in lustrous brown-black glaze. Here then we have the rudiments of technique 2. Sometimes, however, the broad glaze band has over it a narrower band in lustreless cream-white, that is, the rudiments of a synthesis of both styles which itself has also a later history. Of rim-fragments (19) corresponding to though not fitting these bottoms, some showed the band in lustreless white, some again the band in lustrous black glaze. The eighth and last metre repeated the story told by the seventh metre. Here out of a total of 69 fragments of ‘Kamares’ cups 33 were rim-fragments. These fragments had either a broad band under the rim in lustreless cream-white on a brown-black slightly lustrous glaze slip or a broad band in brown-black slightly lustrous glaze on the buff ground of the clay.

Of the whole deposit represented by the finds from these two last layers nothing could more clearly demonstrate the completely pre-Mycenaean character as a whole than the fact that alongside of these typically Minoan cups, themselves in such abundance, not one specimen of the common unpainted cups of crude squat form so characteristic of all ‘Mycenaean’ deposits occurred. All other definitely Mycenaean fabrics were equally conspicuous by their absence. The fact, however, that the deposit of this pit ends at the surface without containing finds of distinctly ‘Mycenaean’ character is in itself remarkable. The explanation is that the surface here sloping down west is coincident with the pavement level of the W. Court. The lower strata

at least of the Kamares deposit here, in contrast with that of the test-pit of the Third Magazine, which being near the summit came to be removed entirely

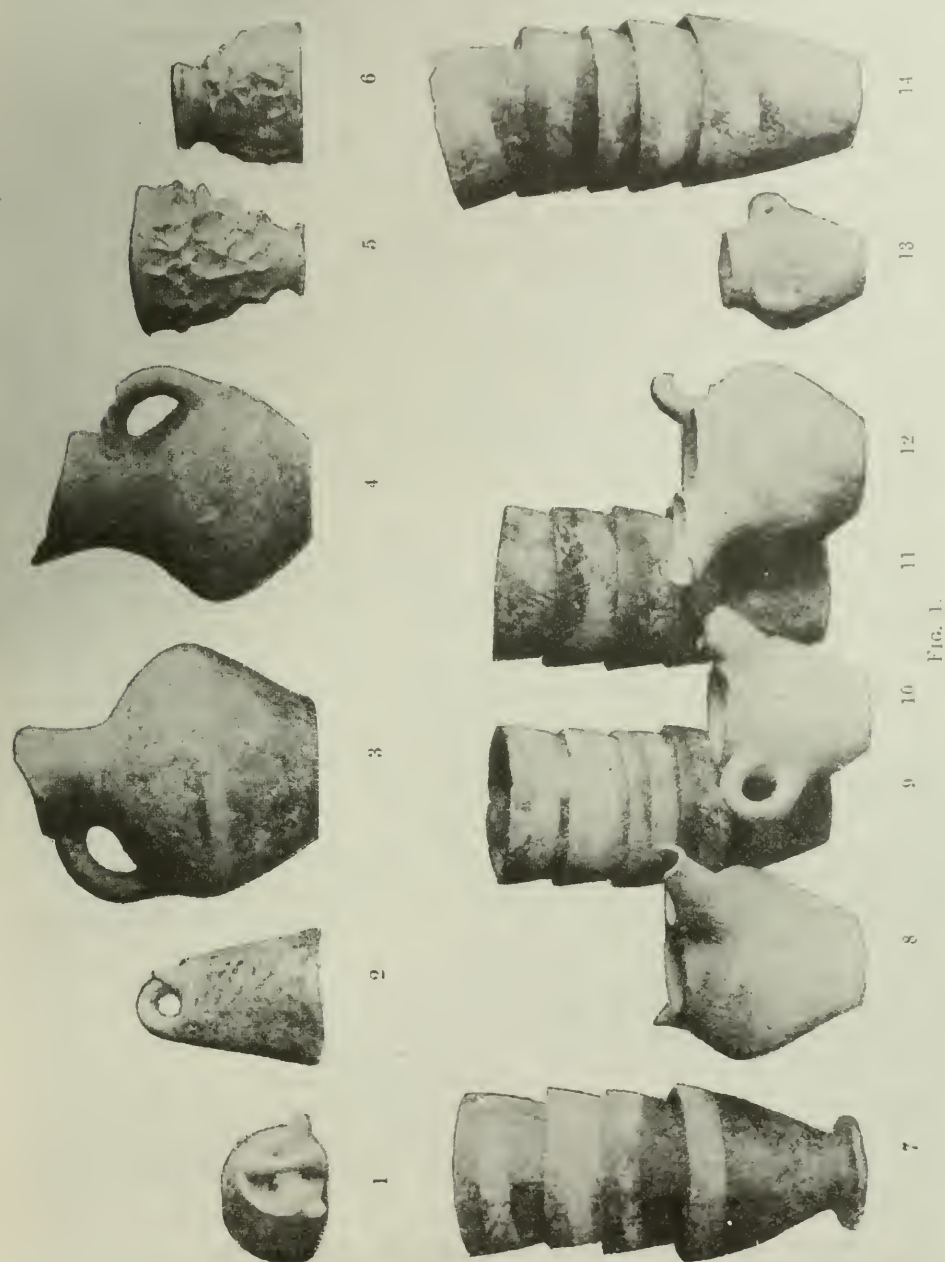


FIG. 1.

in the process of levelling away preparatory to the laying of the Palace floors, remained undisturbed and came up to the floor. Above that floor-level again,

in this region represented by the pavement of a public square, the deposit contained, as was to be expected, no finds at all.¹¹

While, however, in the case of the test-pits on which we have hitherto relied we can in a general way be fairly certain that the painted ware found in the same deposit with the latest neolithic fabrics must belong to the earlier stages of the painted series, we cannot be quite so certain even in the case of the W. Court test-pit how much if any of the deposit came to be removed, and so whether or not the whole of the deposit is early. For this reason we are able to obtain from that deposit only the main primary features of the early painted series as a whole in relation to what went before and also to what followed. For such land-marks between earlier and later as are afforded by the existence of floor-levels in the deposit we must look elsewhere. And the special lesson taught by the absence, from causes already stated, of post-neolithic deposit in the test-pit of the Third Magazine and its presence in the W. Court test-pit was that such evidence was to be sought away from the central regions of the palace. We were therefore not surprised when we found that the data we wanted were forthcoming in the terrace regions connected with the East Wing of the palace. Most important in this respect were the regions of the Spiral-fresco and the N.E. and S.E. Kamares areas.¹²

In these localities the deposit begins with neolithic remains above the virgin soil and comes up to well-marked Minoan floors. These floors in the case of the area of the Spiral-fresco may be later and probably belong to a palace of the Middle Minoan Period. Of this early deposit in the case of the area of the Spiral-fresco and of the next area W. of it, that of the Room of the Olive Press, a record was kept according to metres. As a whole, however, in view of the steepness of the slope and the amount of building that went on here from an early period, the formation of deposit cannot be expected to have been so regular or so undisturbed as it was in the case of the more level and at the same time more outlying region of the W. Court. Reckoning from the virgin soil there were four metres of deposit altogether up to the level of the Minoan floor. This deposit was almost entirely neolithic from the first metre upwards and in a general way it could be said that the first metre which contained no painted fragments must be earlier than the second, third, and fourth which contained painted sherds in very small but increasing proportions. The earliest painted fragments in the second metre (Room of the Olive Press) happened, however, to be of wheel-made 'Kamares' cups, and probably had got down into earlier deposit than they belonged to. Again in the fourth metre, that immediately underlying the Kamares floor, neolithic ware is still so largely predominant that out of 512 fragments 445 were neolithic, while only 67 were 'Kamares' painted and unpainted. This,

¹¹ A solitary exception in the way of fragments of vases in the Palace style found in deposit in the W. Court along the outer edge of the West Wall of the building is

adequately explained (*B.S.A.* vii. 51), by the derivation of the fragments from rooms formerly existing above the adjacent magazines.

¹² *B.S.A.* viii.

in combination with the fact that the neolithic fabrics nowhere give any indication of decline, points to the possibility that some of the upper deposit had got removed preparatory to the laying of foundations and floors. Thus once more we cannot be certain that we possess the data complete up to the time of the construction of the floor. On the other hand the existence of the floor itself is guarantee that the painted ware as a whole found beneath it is earlier than the ware found above it, and thus the floor forms a landmark in the Minoan Epoch by means of which we are able to differentiate an earlier period from a more mature one in the history of Minoan pottery. The results are in this respect in accordance with the evidence that was forthcoming elsewhere. Thus we find the common painted 'Kamares' cup once more belonging to the early painted series, and although from the condition of the deposit we cannot say how early occurs the first use of the wheel, of which there are the marks on these cup-fragments, we can be certain that this must have occurred in this early period at some time or other previous to the laying of the foundations and floors which mark for us a more mature epoch. Again the early origin of the painted ware with ripple-motive previously referred to (p. 160, and Pl. IV, 1-5) was once more shown by the fact that a fragment of a cup or small bowl, wheel-made with the ripple-motive on the inside, occurred in the deposit underneath the 'Kamares' floor in the third metre. That the occurrence was not accidental was shown by the fact that in the fourth metre also there was a fragment of a bowl, also wheel-made, with the same motive. The early occurrence once more of this curious kind of decoration is in accordance with the view set forth above, that the painted ware with ripple-motive is a direct imitation of the rippled and hand-polished neolithic pottery which was so favourite a fabric in the preceding era. General characteristics are once more in harmony with these particular facts. Thus though the proportions are still small (67 out of 512 fragments) the fourth metre, that immediately underlying the 'Minoan' floor, shows the use of lustrous black glaze in imitation of neolithic black hand-polish already inaugurated, and fragments with more or less lustrous black glaze slip, with or without band-design, alternate with fragments having bands in lustrous black glaze on the buff ground of the clay.

Attention has already been called to the appearance of painted geometric imitations of black, hand-polished, white-filled, incised, neolithic ware, of which a characteristic fragment was already published by Hogarth-Welch, *J.H.S.* xxi. 97, Fig. 31, with light design on a dark ground. In an early Minoan chamber on the E. Slope good specimens of this were found in which the white geometric pattern is helped out by subsidiary vermilion. A parallel to this phenomenon is seen in the occurrence of pre-historic painted geometric ware with dark design on a light ground. In the Room of the Olive Press in the deposit immediately underlying the Minoan floor, that is, in the fourth metre, there were six fragments of this early geometric fabric. The ware in question has hatched pattern in the form of dice or triangles, &c., or parallel groups of narrow geometric bands which going obliquely

sometimes cross each other so as to form a central net-work lozenge at either side of the vessel, in lustrous, sometimes only half-lustrous, red-brown glaze on a buff, sometimes pale yellow-grey, clay slip on terracotta red clay. The ware is always hand-made at the beginning of the painted series. An early painted geometric style with dark design on a light ground is known from other sites, though, as far as known to be native, without the lustrous glaze which is typical of the Cretan fabric. In Melos a pre-historic geometric style is, indeed, at one period so characteristic as to be the typical one at the beginning of the painted series. In these the design is painted in lustreless black on a white slip.¹³ Certain early fragments with geometric pattern in lustrous varnish are in this respect so much out of harmony with the context in which they occur in Melos that they can hardly be native and may very well be from Crete.¹⁴ On the other hand at Knossos certain fragments from other parts of the site having geometric design in lustreless black paint on a light ground so much resemble the pre-historic geometric ware of Phylakopi as to be almost certainly Melian. The Cretan style of lustrous geometric ware, while particularly characteristic of the earliest Minoan age, survives into a period in which the use of the wheel has become universal.¹⁵ Thus wheel-made as well as hand-made varieties of the common Minoan cup are often decorated in this style. The 'sheep-bell' vases (Fig. 1, Nos. 1, 2) in the same style are a curious sub-species of the kind of cup referred to.

From the deposits beneath the 'Kamare' floors the general result is thus once more obtained that for the early series we have either (1) lustreless cream-white design on a lustrous black glaze slip, or (2) design in lustrous brown-black glaze on the buff ground of the clay; that is to say, once more, the early rudiments of two painted styles originating together and having respectively (1) light design on a dark ground, and (2) dark design on a light ground.

2. Above the floors of the First Palace in all the regions where these occur the deposit was found to belong rather abruptly to the finest Minoan epoch, and the two simple styles of the Early Minoan Period are seen developed respectively into an elaborate polychrome and a simpler but equally mature monochrome style. The explanation of this phenomenon is one that may be generalised into a law for all undisturbed floor-deposits, to wit, that house-floors being regularly swept do not contain a deposit record of the whole period, during which the floored space was used but only of the close of that

¹³ *E.S.A.* iv. 41.

¹⁴ *Ib.* 40. If the painted geometric sherds from Tell el-Hesi, which have been assigned with considerable probability to the Aegean, really have a lustrous glaze, then those also may be of Cretan provenance. *Ib.* 41.

A painted geometric vase from Zakro, with cylindrical neck and angular shoulder having two suspension handles, has its shape and suggestions of a metal proto-type in common with

a similar incised sub-neolithic vase from the same deposit. This instance is in harmony with the evidence from the Cyclades, where, as in Melos, at the beginning of the painted series incised and painted geometric wares occur side by side.

¹⁵ The beaked can, Mariani *Mon. ant. dei Lincei*, vi. Pl. X. 23, belongs probably to the later geometric class. S. Evans, II. *Onuphios Deposit in Cretan Pictographs*, 114, Fig. 106

period when the floored area for whatever reason came to be abandoned, and that as a rule there is a record of the final period itself only if the abandonment has been an enforced and sudden one. A quiet flitting would never have left behind it the series of beautiful vessels, more or less complete, in fragments found on these Minoan floors. The missing data necessary towards filling up the gap in the evidence can only be supplied by waste-heaps or tombs belonging to the period not represented in its entirety by the deposit on the floor itself but only in its final stage. Meanwhile we must content ourselves with what we know of this Middle Minoan pottery in its full maturity and cannot profess to describe the steps by which the early parallel styles, with light design on a dark ground and with dark design on a light ground, came to be developed into the elaborate polychrome and monochrome styles of which we have such ample evidence on these Minoan floors. Bright orange-tinted red, which occasionally occurs on neolithic incised ware,¹⁶ seems to form the earliest companion to white, and the earliest step in the polychrome direction. How the later colours came in which produced a developed polychrome style we cannot say. We only know that above floors of the Middle Minoan period, universally indeed in the case of those adjacent to or within the area covered by the palace, polychrome design with lustreless white, yellow, orange, red, crimson on a lustrous black varnish ground, in constant company with an equally mature monochrome style with design in lustrous black varnish (usually) on a fine buff clay slip, is seen all at once as a *fait accompli*.

That, however, the polychrome was the more favourite style of the two was evident from the fact that universally in the deposit it was found that vessels on which special pains had been bestowed were in this technique. This is the so-called 'Kamares' ware in its purest form.

The types which illustrate the finest Minoan technique may be classified thus:—

I. Cups. 1. Vaphio or Kefti shape, (*a*) with straight or slightly concave sides and angular contours, (*b*) with double-curve sides and rounded contours. 2. Tall flower-pot shape with and without handle. 3. Tea-cup shape, one-handled large and small. 4. Bowl types.

II. Vessels with different varieties of beak-spouts. 1. Two-handled beaked jugs and jars. 2. One-handled, sometimes three-handled, beaked cans. See *J.H.S.* xxi. 84–88, Figs. 14, 7, 8, 9. Pl. VI. *a*, *b*, *c*.

III. 1. Jugs of the modern oinochoe type, *ib.* 86, Figs. 10, 11. 2. Amphorae or two-handled jars, *ib.* Figs. 12, 13.

IV. Fruit-stand vases of the type illustrated, *ib.* Figs. 15, 16.

Of these types by far the most common is that in the first class of cups, and among these the 'tea-cup' shape. The rarest type of vase is that

¹⁶ Already in the second metre from the incised neolithic fragment had traces of red virgin soil in the Room of the Olive Press and filling.

in the fourth class. The 'tea-cup' style of vase is at the same time that in which form and decoration attain to the greatest refinement.

Examination of a typical lot of fragments will give some idea of the vast disproportion in numbers between cups of the different shapes and all other kinds of vessels. Thus in one such lot, out of 187 rim-fragments examined, 173 belonged to fine Minoan cups. Out of 71 bottoms, 61 were of different types of cup, while only 9 belonged to larger vessels such as beaked jugs and cans. When we come to handles we have the same tale. Out of 52 handles 45 belonged to painted cups of the different types, while only 7 belonged to beaked jugs. Of sherds fractured all round, again, out of 519 examined no fewer than 500 belonged to the different types of Minoan cups.

That the cup type of vase was the most favoured in the Great Minoan period is, however, shown not only by the quantities produced, but by the quality of the workmanship. For proof one has only to turn to Pl. V. where some of the best specimens are reproduced in colour. All three belong to the 'tea-cup' type of vase of rather large size. The design, in the polychrome style, in lustreless cream-white, with details in lustreless red, appears in all three specimens on a highly lustrous black glaze slip, which in the case of vase 2 has a rich olive-brown tint, all on pale finely sifted terracotta clay of a section so thin as to remind one of the best Venetian glass.¹⁷

The most elaborate design is that of vase 1 with its elegant combination of rosette and tailed spirals. It is easy to conceive the side rosettes embossed on metal originals. As we shall see below, the potter sometimes actually reproduces such relief. As regards the colour effect generally in such examples, the richness and harmony are largely owing to the fact that the pigments used give tones of the respective colours. Thus white appears as a beautiful cream tint, the red has a touch of orange or terracotta, while the crimson emerges with a cherry tint, recalling that of a rich red wine. Not only so, but the lustrous dark background varies with almost every vase. In the case of vases 1 and 3, for example, the glaze background has a brilliant black metallic lustre, in the case of 2 it is a rich brown with an olive tint, in other examples a harmonious shade of purple-black is so common as almost certainly to have been intended when once under certain conditions it had been produced perhaps as the result of accident.

In the early period of this technique, going back as it does on neolithic traditions, it is probable that geometric motives were the most common though not the only ones. In the mature period, geometric and curvilinear designs exist side by side. Examples of such geometric decoration are the vases reproduced in colour on Pl. VI. 1, 2. Both are of the tall flower-pot

¹⁷ The vases are thinner in section than appears on the plate because it is impossible in colour and with the brush to reproduce so fine a section.

¹⁸ The tailed spiral occurs in lustreless colour in the first grave at Mycenae, see F. and L. *Myth. Thongesf.* p. 3 I. 3. For another frag-

ment in 'matt' colour from Mycenae, see F. and L. *Myk. Vas.* 54, 55, and Fig. 33. The tailed spiral motive was a favourite space-filling device also in fresco-painting probably at this and certainly at a later period, see *B.S.A.* vii. 87. Fyfe, in *Journal of the Royal Institute of British Architects*, p. 121, Figs. 45, 46.

type without handle. The vase on Pl. VI. 1 has a fairly large base and is of normally thin section. VI. 2, has an extremely small base and very thin section. In the case of the former the lustrous brown-to-black glaze slip covers outside and inside, in the case of VI. 2 the slip forms a rim-band on the inside, the rest of which has brush spray-spots in lustreless white, red, and lustrous black. The mellow colour effect speaks for itself, and it has only to be remarked that the variations from brown to black of the lustrous varnish slip are, as so often, partly the result of irregularities in the firing, partly the outcome of a combination of the tint of the glaze with that of the underlying buff ground of the clay, which appears through the semi-transparency of the glaze where that is laid on thin.

Perhaps the finest cup in the polychrome style is that reproduced in colour Pl. VI. 3. The vase, like all the others, was fitted up out of fragments. Many parts, including the whole of the rim and handle, are wanting. In this case an elaborate water-lily design starts from a crimson centre in the middle of the base in alternate radiating lustreless white and red lines. The white lines on the body of the vase become petals, the red ones meeting over the petals in a complicated design border these above. The tops of the petals and the edge of the design above are stamped out into very low relief in imitation of repoussé metal work. The design appears on a highly lustrous black, at parts brown-black, glaze slip—repeated on the inside—on very fine dull grey clay of extremely thin section. The decorative fitness of this design, in its union of quiet, harmonious colour-effect with the graceful outlines merging into low relief on the marvellously delicate clay, produces an impression of correctly elegant refinement so truly classic as to be almost Greek.

Into the same context with these vases comes the series of selected polychrome fragments, all from the S.E. Kamares area, figured in colour on Pl. VII. All but one of the specimens are again apparently of cups. These cups show the usual variations in shape according to the curve of the sides. The decoration is again extremely characteristic. There are the usual colours—lustreless cream or cream-white, yellow, orange, red, crimson, all on a highly lustrous black, purple-black, brown-black, metallic grey-black glaze slip on fine terracotta-red clay, which sometimes has a buff clay slip allowed in certain schemes of decoration to appear as part of the design.

The vase with low relief, VI. 3, fittingly introduces us to the class of 'Kamares' vases in which relief-work comes to the aid of colour to enhance the elaborate effect of light polychrome design on a dark ground. By far the greatest number of vase-fragments in this manner were found in the S.E. Kamares area. The best fairly complete example in this style was that found by Mr. Hogarth in the south suburb of Knossos and illustrated in colour *J.H.S.* xxi, Pl. VI. a. From the palace-region we have not been able as yet to fit up any fairly complete specimens, but from the quantity of fragments discovered it is clear that this variety in relief shared an equal popularity with the other, and at its best had reached the same level of elaboration if not of refinement in colour-effect. Except, however, where the relief is mere imitation of repoussé work, as in the case of the vase described above, the section

never reaches the same extreme of thinness as in the varieties painted in the flat. It is probable that most of the relief work is in origin an imitation of metal-relief and that clay-forms came later to be treated in the same way. At any rate one must not expect too much consistency, for the metal prototypes are often themselves imitations of clay forms, so that the relief-work in which it imitates metal technique may do so apart from any indication of the fact in the mere form. There is no doubt, however, that the metallic origin is more apparent, even from the fragments, in the case of those with relief-work than in the case of those which have none. In the one set, rounded shapes predominate, in the other sharp turned down rims, convex and concave curves, connected by abrupt transitional angles marking joinings in metal prototypes, are the order of the day. The colour part of the technique is the same whether there is relief or not. Relief only comes in to aid colour in producing a more elaborate surface effect with the addition of light and shade. The most favourite relief-device is the toothed or bossed band, which as a unit by repetition is used to produce a complex surface pattern in the same way as a coloured or incised band. Thus we have parallel bands, zig-zag bands, hatched lozenges. Curved bands also occur, though these are rarer. The whole relief-work is usually covered by a black, more frequently purple-black, lustrous glaze slip on which in the intervals between the relief-work the different colours are laid. This relief-technique seems to have been the more favourite one for all kinds of vessels other than drinking ones such as bowls and cups, in the case of which elaborate relief-work must have been avoided because inconvenient. This consideration will be sufficient to deter us from regarding the vases with relief-work as belonging necessarily to a later development. They are of course strictly contemporary with those in the flat found in the same context with them. Only for reasons of convenience the relief-work is usually restricted to types of vases in the case of which the addition of the relief is not a drawback. Thus it is that by far the greater number of vases in this style belong to our classes II, III, IV, above. The most curious and rare examples of such relief-work are perhaps those in Class IV of 'fruit-stand' vases. See Fig. 2. The effect of the lustreless cream-white, yellow, red, deep crimson, in combination with the relief-work, on the lustrous purple black slip on a clay surface purposely left rough, is unusually rich in its quiet brilliancy. In such examples we have the most elaborate effect that could be achieved by the polychrome technique, and at the same time all that most distinguishes the polychrome ceramics of the Minoan people from the monochrome style that begins to dominate at a later time. As characteristic of this Minoan polychrome style, whether in the flat or in relief, the decorative feeling for colour-effect, as apart from mere imitation of natural combinations of colour, copied from the flower and plant world, can never again in later times be said to have reached the same level in ceramic art. For anything similar in this respect one has to go to another technique belonging to a much later age, that of old Venetian glass.

In contrast with this polychrome style the parallel technique with monochrome design in lustrous black or brown-black glaze on the buff

ground of the clay, is evidently regarded as a useful short-hand method of decoration for quick work on more ordinary vessels. Thus it is that monochrome design could never reach so full an elaboration as the other, at a time when such elaboration in an architectonic sense was enforced by an awakening genius for glowing colour, whose nearest analogies in another field we must seek in the inlaid metal work, the textile fabrics and the wall-paintings of the period. The artistic interest in ceramics at that time was to produce delicate and harmonious decorative effects of a polychrome character by



FIG. 2.

means of subsidiary colours such as yellow, orange, red, crimson in subordination to the dominant cream-white on a brilliantly toned lustrous black ground. Thus it is that the great Minoan period yields no instances of very elaborate decoration in the more homely monochrome style with dark design on a light ground. This fact must not, however, lead us to ignore the existence of this technique at this period altogether, as is apt to happen when the polychrome ware is isolated into a class by itself and taken as characteristic of the period to which it is referred regardless of the complete context in which it occurs. The monochrome tendency on the contrary showed remarkable tenacity of life. The conditions encouraging survival were (1) the universal use as ground of the glaze medium in the polychrome style, (2) the

durability of the medium itself in decoration as compared with the lustreless colour pigments, (3) convenience in practice for the potter.

The absolute parallelism of the two styles is quite apparent from the test-cases which, taking all fragments indifferently from the deposit-level examined into account, exclude selection. Thus in the first metre above the 'Kamare' floor underlying the Room of the Olive Press with 37 fragments



FIG. 3.

I noted of the painted sherds 9 as polychrome and 9 as monochrome. In the second metre again, out of 64 fragments examined, I noted 23 as polychrome, 23 as monochrome, 3 as stray neolithic and the residue as uncharacteristic.

If we now pass to vases more or less complete we find that we have the same story. A glance at Fig. 3 will convince us at once that the vases 1, 2 of the Vaphio shape, with dark design on a light ground, belong to the same context as 4, which has light design on a dark ground and with 3, on which both techniques are seen united. This latter example only shows all the more clearly that both techniques were practised together and that they were

sometimes combined to produce a new decorative effect. That there can be no question of a transition from the one technique to the other is evident not only from the fact that all these vases belong to the same deposit but also from the circumstances that they all belong to the same company as the polychrome vases on Pls. V. VI. 1. 2. They were all of them found in the same deposit on 'Kamares' floors belonging to the N.E. Kamares area. A more curious and at the same time elaborate example of the combination of the two styles is VI, 4 from the S.E. Kamares Deposit. Here the foundation of



FIG. 4. (From *B.S.A.* viii.)

the design is formed by a kind of lozenged meander bands alternating with single bands and figure-8 chain bands in lustrous black glaze on the fine buff surface of the clay. So far all seems to be monochrome until we observe the polychrome details in lustreless white and red which are an intrinsic though subordinate part of the design. Inside again is a lustrous black glaze slip on which inside the rim is a narrow band in lustreless vermillion. This vase had an equally interesting polychrome companion in the shape of a cup of almost exactly similar form on which, below a narrow band in lustreless deep crimson, the lustrous glaze itself appears, this time as part of the polychrome design, in the shape of dots in a series on short vertical bands in lustreless cream-white going round the body of the vase

twice at an interval, once inside. Alternate figures of 8 between the vertical bands are in lustreless yellow and deep crimson—all on a lustrous olive-tinted black glaze slip inside and out on terracotta-red clay.

All these cups and cup-fragments are wheel-made, that is to say, in the Middle Minoan period, to which these cups belong, the use of the wheel, proved in isolated cases for the earlier period, is universal.

That, however, the wheel was not used for all types of vessels, is an equally certain fact having technical reasons of its own. The two beaked jars Figs. 4, 5, for example, like many large vessels, were built up by hand.

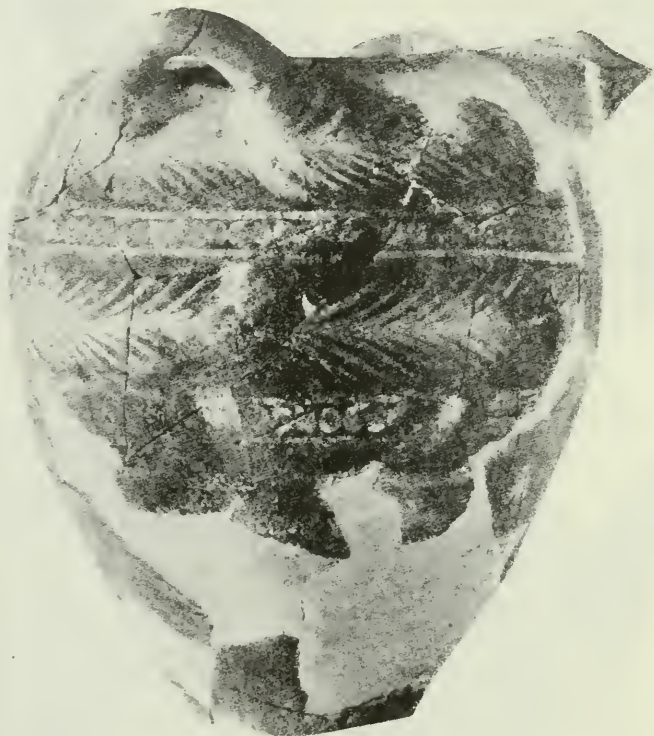


FIG. 5. (From *B.S.A.* viii.)

The real interest of these vases is, however, of another kind. In the case of both of them the architectonic ground-work of the design is in lustreless cream-white on a lustrous black glaze slip. Subordinate details are in bright red and dark crimson; 4. has three-fold bands, white-red-white, and alternate crescents, red with a crimson spot; 5 has alternate bands red, but always so that the red alternates architectonically with the cream-white. The dot-bands have smaller crimson dots on larger cream-white ones.¹⁹ The crescent motive in the design is of exceptional interest because it recurs on

¹⁹ 4 has h. 58½c. base d. 17c. shoulder d. 42c. rim d. 25½c. 5 has h. 49c. base d. 17½c.

some rare fragments of Minoan fresco from the same deposit.²⁰ The spiral and branch motives of the vases probably also formed elements of design in a Minoan Palace style of decoration common to fresco-painter and potter at this period. The running spiral, which in combination with the rosette plays so large a rôle on the palace dados of a subsequent age appears here already in full use. And the elaborate scheme of rosette and tailed spirals such as it appears on the polychrome vase Pl. V. 1, must equally belong to a Minoan Palace style and can hardly have been the property of the vase-painter alone. The polychrome style as a whole suggests intimate relationship with the art of the fresco-painter, which might be made out in other cases than the above, did we possess more plentiful remains of the Middle Minoan Palace with its decorations.

3. The pottery just described belongs to the deposit immediately above the 'Kamares' floors and to the best Minoan period. The depth of deposit found to be uniform was considerable.

For example, in the test-pit in the Room of the Olive Press classes of ware predominant in the first metre also recurred in the second metre. Much of this is to be explained by the existence of upper floors, the falling in of which with their contents would account for the uniformity in the deposit to this height. In the case of these two metres polychrome and monochrome vases were found in equal proportions. In the third metre, that immediately underlying the palace floors of the 'Mycenaean' period, the proportion of polychrome fragments happened to be higher (17 monochrome, 27 polychrome), but in that case several of the polychrome fragments belonged to one vessel, so that even at this high level the proportions are found to be fairly equal.

This result is important as affording warning that with the laying of new floors we are not to expect any abrupt transition in development corresponding with the gap in the continuity of the deposit above these floors. We have here once more only a repetition of the phenomenon noticeable in the case of the deposit above the floors of the Middle Minoan period.²¹

One mark of lateness, however, characteristic of the deposit of the third metre is the fact that neither here nor elsewhere, as far as on record, at

²⁰ See Fyfe, 'Painted Plaster Decoration at Knossos,' in the *Journal of the Royal Institute of British Architects*, Vol. x. No. 4, p. 116, p. 109, Fig. 2, restoration A. The crescent device is one of the most common on contemporary Melian ware, see *B.S.A.* v. 17. The early occurrence at Knossos in vase and wall-painting thus brings back to the great Minoan period the origin of the similar design in post-Mycenaean times. See Boehlau, *Aus Ion. u. Ital. Nekropolen* p. 65, Figs. 26, 29, 30. Taf. ii. 5, iii. 1, 3. Also in polychrome design on b. f. fragment from Mytilene in Brit. Mus. See Boehlau, *ib.* 71. Similarly the garland

with pointed leaves occurring on post-Mycenaean pottery, *ib.* Taf. iii. 1 x, 17, xi. 1 'Εφ. 'Αρχ. 1888, 7, 2, has historic continuity with the exactly similar motive on our vase. The Samian vase, Boehlau iii. 1, shows both our crescent and our garland motive together. The survival or revival as the case may be is so faithful to tradition that even the tendency of the design—r. in the case of the garland, l. in the case of the crescents—is repeated. The crescents change their direction only when they are repeated in a second series.

²¹ See above, p. 170.

this high level did polychrome ware of the finest quality, whether in the flat or in relief, occur. On the other hand there is the distinct tendency of polychrome design itself to become monochrome, that is simple light design on a dark ground. Again, greater quantities of vessels, especially in Class I, occurred than previously with lustrous black glaze slip, or with buff clay slip, or ground without design. The cups in Fig. 6 are in this respect characteristic of the deposit to which they belong. Of these, No. 8 might



FIG. 6.

be taken for the common unpainted 'Mycenaean' cup so typical of a later period. The context, however, in which the cup occurs, makes it quite impossible that it can be Mycenaean. It was found along with eight others exactly similar in 'Kamare's' deposit, of the N.E. Kamare's area, in which no single fragment could be identified as Mycenaean. In the same company and in exactly the same clay appeared the variety with handle, 7, whose affinity with the Minoan types 5 and 6 is at once apparent, and the curious horned 'sheep-bell' 9. The latter again has a painted prototype parallel

with the common painted Minoan cup, see p. 170 and Fig. 1, Nos. 1 and 2. The class of cup in question, though it is so like the latter type, could be distinguished at once by its thinner section and its lighter, more elegant shape. The sorter who assisted me, when tested on the matter, would not hear of those cups being put with the heaps of Mycenaean ones, but insisted on their being kept in one lot with their Minoan kin just as they were found. In this lot, out of a total of 163 fragments it was found that 135 had the typical Minoan black glaze slip while 25 were monochrome without slip, and 3 were uncharacteristic.²² Of those with black slip again 19 had design, namely, 7 in lustreless cream and white, 11 in white and red, and 1 in white, red and crimson.

The existence in Minoan deposit of this prototype of a type so characteristic afterwards of every Mycenaean site is of the utmost importance as being one of the links which, with others, go to establish the continuity without break of the earlier with the later civilization. In this late Minoan deposit the ware with rippled glaze slip was again observable. One fragment, of a jug, was found in the third metre, and it had below the rippled glaze field narrow bands in lustreless white on the lustrous typically Minoan purple-black glaze slip, which may here have been a broad band. This style of design, like the above type of cup, is one of the undoubted links in the evidence of racial continuity between the civilization of the Minoan people and that of the later era. Having its origin far back in the early Minoan period, in a tradition that is in turn a survival in a new medium from the neolithic age, it survives into late Mycenaean times. See above p. 160.

It is in the period represented by this later stratum that the gradual decline of the polychrome technique must have taken place. From the condition of the deposit itself we are able to say with sufficient certainty that polychrome ware was found in greatest quantity and in finest quality in the stratum immediately above the Middle Minoan floors. It is equally certain in a general way that the later stratum of deposit immediately underlying the palace floors shows a lack of polychrome ware, of the finer qualities. The technique with polychrome design on a lustrous black glaze slip itself tends, as we have seen, to become monochrome, that is, simple, light design on a dark ground. When this stage has been reached the style with light design on a dark ground is found, even for the finer kinds of ware, to have no practical advantage over the sister style with dark design on a light ground. The non-durable character of the lustreless white which it had in common with all the other 'polychrome' colours may now indeed appear at a disadvantage in comparison with the durability of the lustrous black of the glaze design. The two styles came thus to be on an equal footing of competition with the chances of final victory in favour of the monochrome style. But this tendency is itself the work of the Minoan civilization

²² The large proportion with black glaze slip in this case is to be accounted for by the fact that many of the fragments were of a type of cup that almost always has a slip.

entering upon a new phase of its existence, not some influence imposed upon it from without, for as we have seen the evidence afforded by the pottery taken in its complete context is that the monochrome tendency was present and developed alongside of the polychrome from the beginning, so that by the time the polychrome style began more and more to sink into latency the monochrome technique, already at the same stage of development as the other, was simply left to take more and more possession of the field.

If we now compare the results obtained at Knossos with the evidence forthcoming from other sites it may be possible to come to some general conclusions. First of all has to be noted the great depth of the deposit at Knossos containing Minoan ware. In the test-pit in the Room of the Olive Press fragments of this ware began to occur in the metre immediately underneath the floors of the Middle Minoan period in sufficient quantities to exclude any suspicion of their presence being accidental. Above this floor again the Minoan deposit, as we have seen, is continuous for 3 metres up to the paving of the later palace. We have besides to take into account the interval, possibly a long one, represented by the period during which the floored areas were inhabited and during which no deposit could be allowed to accumulate on these floors themselves, though corresponding deposit has to be postulated as accumulating elsewhere. We have thus to allow a very long period for the development of Minoan ceramics from their earliest beginnings to their era of decline. Further, with the evidence of so much deposit before us, it is clear that the pottery in question must have been manufactured at Knossos itself. On the other hand the scantiness and isolation of this ware in all deposits in which it has been found outside Crete are in such complete contrast to the richness of the Knossian deposits that no further proof is needed to bring us to the conclusion that Crete itself is the true source of the similar ware found elsewhere, as in Melos, Thera, Tiryns, Mycenae, Egypt.²³

Most remarkable in this connection are the finds from Egypt. The complete isolation in this case made it possible to identify without difficulty all that went in the same class with the intruder. Accordingly it is no surprise to find the monochrome fragments in 'fine, hard, thin, light-brown paste of Aegean origin, with iron-glaze bands' correctly assigned by Petrie to the same period and context as the polychrome fragments with lustrous black glaze slip. The parallelism of the two styles which we have found to hold at Knossos is thus confirmed by means of a few isolated but most important fragments found so far afield as Egypt.²⁴ The chronological

²³ *B.S.A.* iv. 47, v. 19. Furtw. u. Loeschcke, *Myk. Thongef.* vi. (from IV. Shaft-grave). Furtw. *Antike Gemmen*, iii. 20 and notes. *J.H.S.* xi. 275-6, Pl. xiv. 5-10.

²⁴ Monochrome ware occurs also at Kamarea, as, for example, Myres, *Proceedings of the Society of Antiquaries*, xv. Pl. I. 6, II. 7.

Hogarth-Welch, *J.H.S.* xxi. Pls. VI. VII. give only polychrome ware. Furtwängler, *Ant.*

Gemmen, iii. 20, note 3, identifies the ware from Egypt and that published by Myres and Mariani with his own and Loeschcke's First Style and further cites 'bei anderen Gattungen' parallels between Egyptian finds and certain ones from Crete and Mycenae, for example, Petrie, *Illahun-Kahun*, Pl. I. 8, with Myres, Pl. I. 6, cited above, and with the vase of the Second Style *Myk. Thongef.* Taf. 3, 12; but

evidence from Egypt is, however, still more important. Petrie judging from the context in which the Kahun fragments were found assigns these to about 2500 B.C. As, however, a glance at the fragments in question and comparison with typical Knossos finds will show, the fragments published by Petrie, like those from Melos, all belong to the best Minoan period. Thus Petrie's dating must be referred to the period of greatest activity in the production of Minoan pottery. If, however, we take into account the earlier period anteceding this, we shall have to go back at least to the close of the fourth millennium B.C. for the beginnings of the use of glaze and other paints in the pottery of Crete. Thus also it will be safe in a general way to say that the development of Minoan ceramic art and the civilization represented by it must have taken up the greater part of the period 3000–2000 B.C. At Knossos there is evidence enough to show that the great Minoan period must have been after the laying of the floors on which were found the best polychrome and monochrome wares in the greatest quantities. Some of the floors referred to probably belonged, as we gave reasons for suggesting, to a palace of the Middle Minoan period, antedating by at least some centuries the foundation of the later palace excavated by us. The floors, the stratification, the fresco, and especially the pottery, all point to a Minoan period of prosperity and wealth, which culminated about the middle of the third millennium B.C., and during which it is no surprise to find that the Minoan people were in busy communication with such centres as Tiryns, Mycenae, the Aegean generally, and Egypt.

III.—*The Pottery of the late Minoan Palace Period.*

One outcome of the Minoan civilization was the gradual process by which, the polychrome style tending itself to become monochrome, both Minoan styles come to be, as we have seen, on an equal footing of competition. All the traditions of technique that did not include the polychrome principle itself were the heritage of the monochrome equally with the polychrome style. First among the old common possessions was the glaze technique itself. This, having been from the beginning the one foundation of all design for the monochrome style, the potter did not now require to put into tentative practice for the first time. He had rather simply to continue the use of it under new conditions according to a method which had belonged to it in contra-distinction to the method of the other style from the very start of their long companionship together. The changed conditions under which the twin styles were now practised were thus simply the outcome of a long traditional past of practice, not of any external circumstances

he does not say whether he regards these latter essentially monochrome examples as belonging to the same fabric as the polychrome ware. From the examples cited, however, the conclusion should be all the same that F. and L.'s.

Second Style runs parallel with their First and that, thus taken together, they answer respectively to the Minoan Polychrome and Monochrome Styles.

indicating pressure from without upon a decaying race. The Minoan people were now, under changing conditions of an essentially intrinsic character, only entering upon a new phase of their existence, and the Minoan potters, though gradually losing hold of their old polychrome faculty, were only devoting themselves with renewed energy, and giving a new turn, to a monochrome style in ceramic art that was as old as the other.

This era of renewed life was that which saw the building of the second palace at Knossos. But so much building on so grand a scale was not possible without the removal of a good many old land-marks. Preliminary to the laying of the foundations a considerable part of the top of the hill was levelled away with a view to gaining as large an area of plane surface as possible for the ground floors of the palace. During those operations all the Minoan deposit in the area covered by the central regions of the palace, along with some considerable part of the latest neolithic remains, disappeared. We have found proof of this already in the case of the test-pit in the Third Magazine. On the East Slope again, where one would not have expected it, the same preparations led at one part to an even more thoroughgoing removal of earlier deposit. Thus, in the whole complex of apartments connected with the Grand Staircase and the Hall of the Colonnades in the East Wing of the palace, the ground-floors were laid at so low a level that in the direction of the Central Court the preparatory excavations by the builders led to the removal not only of most Minoan but of almost all neolithic deposit as well. Accordingly in the area covered by this East Wing we only found evidence of the earlier civilization to the N.E. and S. of this deep excavation. And thus it has come about that the data for the period immediately preceding the building of the palace are not sufficient for an estimate of the process by which the polychrome technique gradually gave way before the growing popularity of the companion monochrome style. That the laying of the palace floors did not coincide with any absolutely new departures in ceramics follows from the previous history of the monochrome technique itself, and is what we should at once expect by analogy with what we found to have happened in the previous period when the Middle Minoan floors were laid. And yet there is a real break in the evidence at this point in the later as in the earlier period. On the floors of the palace we find not the wares that were in use during the whole of the period of habitation of the building, but only those that were in vogue at the end of that period. These all belong to a fully-fledged Knossian style in which the old Minoan system of design with decoration in lustrous black glaze on a buff ground is seen now in a new, advanced phase of development, now, however, without its old companion the technique with polychrome design on a lustrous black glaze slip. Thus the steps in the process by which the monochrome technique secured such pre-eminence as to lead first to the decline and then apparently to the disappearance of the other cannot as yet be adequately traced with the data before us. That could only be done in case we came into possession of the actual deposit-evidence from houses and tombs relating to the period not represented by

deposit on the palace floors themselves. Failing that again the missing links in the chain of evidence can only be supplied by the results of excavations over a wider field and a comparative study of early Cretan ceramics as a whole.

1. We were, however, able in a few cases to find ceramic evidence relating to the early period of the later palace. In one case indeed the actual co-existence of the two styles during the early palace period has in a crucial instance been proved down to a certain point of time, namely, that ushered in by the events, of whatever kind, which for some reason or other led to the filling up and closing of the secret chests of gypsum existing underneath the pavements of the great store-rooms. The data in the shape of pottery in the two styles and in the traditional Minoan manner of this period were given by the contents of one of these chests themselves.²⁵ Other evidence having a bearing in the same general context was forthcoming in regions without pavement floors away from the central areas of the building. In the more central regions, as we have already seen, very few Minoan remains of any kind exist beneath the palace floors. Away from the centre, however, where there is a slope, as in the case especially of the N. W. palace-region, remains that were earlier than those found on the palace floors were in certain spaces found more or less undisturbed on a floor which, all the circumstances being taken into account, must belong to the early period of the palace, antedating the repairs of which we have evidence in one instance in the closing of the store-room chests. In the Eighteenth Magazine there was no pavement and on getting below the level of the clay floor we came upon a plentiful deposit of pottery, among which were several vessels, whole or in fragments, themselves resting on an earlier earth-floor. The most characteristic specimens from this deposit were the one-handled, spouted jug-vases, Fig. 7, No. 1, 2, which are identical in type and decoration.²⁶ The design consists of a band and spiral system respectively in lustrous brown-black and red-brown glaze. The bands have narrower bands and the spirals central rosette-groups of dots in lustreless white, all in a polished buff clay slip on terracotta-red clay. This deposit, while already apparently quite 'Mycenaean' in character, has Minoan types with lustrous black glaze slip whose presence can hardly be accidental, for they occur repeatedly all over the area on the earlier floor in similar company to that of the above vases. In the special circumstances of the case this deposit was limited to areas with earlier floors but without pavement, and was not to be expected in paved regions of the palace which probably had practically the same floors from the beginning. Thus we have not as yet sufficient data at Knossos itself towards a comparative conclusion based on the evidence from different areas. If, however, we go to other excavated sites we shall find that the context in which similar vases occur is the same as at Knossos.

²⁵ *B.S.A.* vii. 47, Fig. 14.

²⁶ These jugs, with differences traceable to the exigencies of the potter's art, are the counter-part in clay of the spouted one-handled

metal jugs of the Kefti. See Müller, *Asien und Europa*, p. 349, Nos. 8 and 9. 1 has h. 41c. base d. 13½c. shoulder d. 29c. 2 has h. 39½c. base d. 14c. shoulder d. 26c.



1 8 2

FIG. 7.

At Melos vases of identical type and decoration occurred along with native imitations in deposit belonging to the mature native Melian period, underlying the latest deposit characterized exclusively by imported Mycenaean ware.²⁷ The true Minoan ware on the other hand was at Melos found in much earlier deposit. At Mycenae, again, a filler vase in the same technique and with similar design was found in the second Shaft-tomb in the same company with the vase having design in 'matt' colours: Furtwängler u. Loescheke *Myk. Thongef.* iv. 14, 13. Exactly similar in technique is the 3-handled jar (F. and L. *ib.* vii. 42) from the Fifth Shaft-grave at Mycenae. The context in which this vase occurs enables us to arrive at a decisive conclusion. It was found along with a series of vases with lustreless colours (*ib.* 39-40), probably native Mycenaean, and with the fragment 41 with spiral design in lustreless white on a slightly lustrous black glaze slip.

There is nothing in this context to justify us in putting the vase 42 later than the other specimens found in the same grave. Yet if we except the fragment with the black glaze slip the vase itself is entirely out of keeping with its environment. The explanation probably is that the vase in question is an importation, presumably from Crete, at a period when vases such as those with the 'matt' colours found along with it were still being manufactured at Mycenae. In that case it is all the more likely that the vessel represented by the fragment with spiral design in lustreless white on a black glaze ground was also, if not an importation, at any rate the work of potters under Cretan influence. There is no other reasonable explanation of the sudden appearance of vases with a finished glaze technique in the simple company of the vases with lustreless colours, which on the other hand seem to have been the regular fashion at Mycenae at the period to which they belong. The handsome filler vase in particular is identical with a type which must have had a metal prototype, possibly even at this time and certainly at a later period reproduced in stone at Knossos. Furtwängler and Loescheke are probably right in putting xi. 56 from the Sixth Grave late in the same series. It and the vase 55 from the same tomb repeat two types that are extremely common at Knossos for the period to which they belong. On the other hand the vases with 'matt' colours from the Sixth Grave (*ib.* viii.-x.) represent the contemporary fabrics native to Mycenae. They in turn belong to a wider Graeco-Aegean context and those with birds have their nearest affinities with the native bird vases in lustreless colours of the mature period in Melos.²⁸

All this is in complete contrast with the consistent story told by the finds from Crete. And the evidence from other sites so far as forthcoming is in complete harmony with that from Knossos. At Zakro, for example, vases—perhaps the finest of their class—with a similar synthesis of the two styles have been found in a similar deposit by Mr. Hogarth.²⁹ The naturalism

²⁷ *B.S.A.* v. 17-18. Three examples of this class are known from Thera. See F. and L. *Myk. Vas.* 21, Figs. 7 and 8, and Dumont 21, No. 45, Pl. II, 21.

²⁸ *B.S.A.* iv. 46.

²⁹ *J.H.S.* xxii. Pl. xii. 2 and 3 contemporary, of course, with vase 1. See Evans, *B.S.A.* viii. 89.

of the design so characteristic of these vases recurs also at Knossos in typical instances in the same medium of lustreless cream-white on a dark glaze ground in a deposit which also belongs to the early period of the palace. The vases from this deposit are grouped together on Fig. 8. The most important in this connection are the two 2-handled 'flower-pot' vases with graceful lily-design in lustreless cream-white on a thin dull purple-brown almost lustreless glaze slip on dull buff clay.³⁰ In this context again light design on a dark ground is seen to alternate with dark design on a light ground while the spiral is found to occur in the dark as well as in the light medium. A numerous class of vases of more pronounced 'Mycenaean' character with naturalistic design in lustrous brown-black glaze on a (usually) lustrous buff clay ground is represented by fragments from different localities which must belong to the same early palace period.

Very important evidence regarding the relation of the two traditional styles to each other at the end of this early period was furnished by the contents of the cist in the Fourth Magazine referred to above. The principal contents of this cist in the light of their bearing on the history of the palace have been already described by Dr. Evans (*B.S.A.* vii. 46-48, Fig. 14). The importance of the evidence in that connection was the proof afforded by the Minoan style of the pottery as to the essentially Minoan character of the earlier parts of the building as a whole. Bearing in mind that the examples selected for that purpose all for the sake of emphasis exhibit the technique with light design on a dark ground, it will here suffice if we put on record the co-existence, with these examples, of the class with dark design on a light ground.

Besides those examples the cist contained 149 other fragments. Of these, 14 sherds, probably belonging to one vessel, an amphora like that cited *ibid.* on Fig. 14, had (all but 2) spirals in lustreless cream-white on an almost lustreless purple-black glaze slip on sooty grey-black clay. In the class of dark design on a light ground again out of 82 fragments, probably many of them belonging to a vessel or vessels of the same amphora-type as the other, 78 had broad bands, sometimes apparently spirals, in lustreless purplish-red (32) or purple-black (46) glaze on the rough terracotta-coloured ground of the clay. 2 fragments had bands in lustrous red-brown, one in lustrous brown-black glaze on a fine buff clay slip on terracotta-red clay. 1 fragment was of a common unpainted 'Mycenaean' cup. As, however, the existence of this type of cup has been already verified in Minoan deposit of an earlier period the above example need not be regarded as an intruder here. 53 fragments without design also apparently belonged to this class.

The fact that, with a few exceptions, most if not all of the fragments in either style apparently belonged to vessels of the amphora, jar, or jug class is quite in harmony with their store-room environment, and that again with the view that they were thrown into the cist with the other *débris* just as

³⁰ The three-handled spouted jug from Thera, F. and L. *Myk. Vas.* 19, Fig. 6, Dumont, *Céram.* Pl. II. 14, is so similar to these

in design and apparently in technique as almost certainly to belong to the Cretan school of this period.

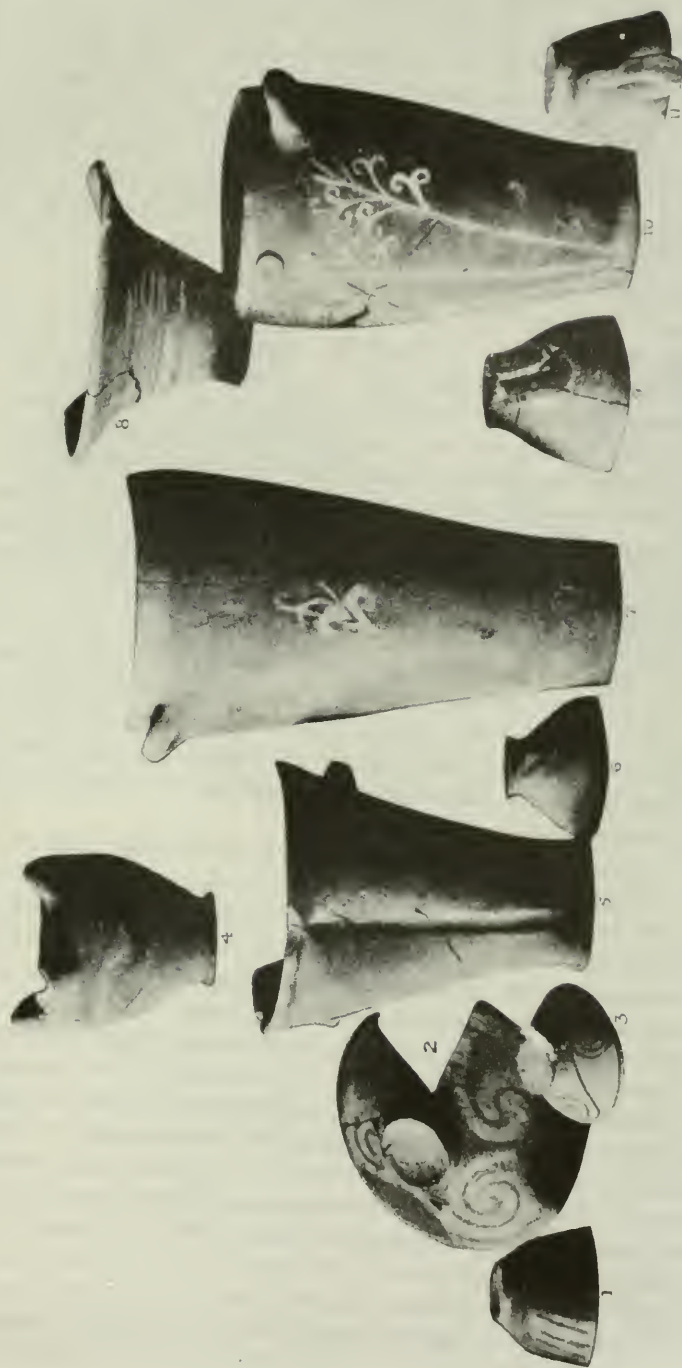


FIG. 8. (From *B.S.A.* viii.)

they were found at hand. They must thus be taken as samples of the sort of wares in use in this store-room environment at the period which saw the closing of the cists. If now with the above fragments we take into account those represented by the vessels or parts of vessels *ib.* Fig. 14 we find that at this period, in the one class of amphorae alone, the style with light design on a dark ground alternates regularly with that having dark design on a light ground. Thus the synthesis of the two styles represented in a certain class of vases of this general period having light design on dark design on a light ground is no real solution of the old Minoan dualism, for at the very end of this period, as we have seen, we find the two traditional Minoan techniques still practised together side by side.

2. The repairs with which the closing of the cists is to be connected as one incident mark the end of an old and the beginning of a new period in the history of the palace. To what extent in this second period the two techniques continued on the old lines of practice we cannot say, because in accordance with a law which we have already found to hold in similar circumstances the relative deposit is lacking above the Palace floors. On the other hand, while it is not very probable that a parallelism of the two styles, which we found to hold in full up to the very end of the previous period, should with any suddenness have fallen into disuse with the changes inaugurating the new era of prosperity signalized by the renovation of the Palace, we have evidence enough that at the end of this period the technique with light design on a dark ground is no longer practised to any appreciable extent. For in the same context with the wares found on the Palace floors belonging in typical examples to a mature palace style native to Knossos, the pottery with light design on a dark ground no longer appears, though the Minoan traditions in latent survivals still continue to exist among the dependent population of the palace.³¹

From the evidence already before us it is however clear that, between the fully fledged Knossian technique represented by the pottery found on the Palace floors and that of the previous period, there is no real break corresponding to the actual break in the continuity of the deposit. That break, as we saw in the similar case of the Middle Minoan habitations, has its explanation in the regular sweeping of the Palace floors. The deposit corresponding to that which is lacking on those floors exists, of course, elsewhere, so that for full proof we have only to await the results of further excavations. That there is at any rate a very distinct reminiscence of the old Minoan technique with light design on a dark ground down to the period represented by the deposit on the palace floors, is shown by some curious transitional fragments in a sort of inverse of the contemporary palace style (see Fig. 9). On these the glaze, which at this period usually forms the design-medium, once more appears as dark background, but instead of the design being in lustreless white on this dark ground, intervals are left in the field in which the buff ground of the clay or clay slip is allowed to appear light against the

³¹ See *B. S. A.* vii. 10-12. Figs. 4, 24, 26-28.

dark background of the glaze.³² This peculiar device for producing light design on a dark ground affords indication besides of the consciousness at this time of the technical inconveniences of the non-permanent Minoan colour-pigments for vessels in constant daily use. On the other hand it is quite possible that show-vessels used in connection with the cult of the dead might prove, by the discovery of tombs belonging to this period, to show a much larger survival of the lustreless light designs on a lustrous dark ground than could be conjectured from contemporary practice in the case of vessels meant for actual household use.³³

Let us now come to the record afforded by this palace deposit as a whole. That deposit, for the reason already stated, does not represent the



FIG. 9.

whole of the general period to which it belongs, but only the end of that period. The story told by the deposit found, in similar circumstances, on floors of the Middle Minoan period is thus once more repeated in the case of that belonging to the great days of the Palace. Thus the pottery found on the floors in the more central regions of the Palace all belongs to the mature Knossian period. In this deposit 'Mycenaean' pottery in a fully developed Palace style native to Knossos occurs in one general context with the magnificent series of stone vases, with the frescoes of the great period, and with the written records of the Palace that now adorn the museum at Candia. Already in the first year of excavation some fine fragments in this grand Palace style were found in the Eighth, Ninth, and Tenth Magazines

³² There is here a curious anticipation of the means by which the Greek black-figured technique became transformed into a red-figured style in the latter half of the sixth century B.C.

³³ Again and again in later history we find the survival and revival of polychrome practice in ceramic art connected in a special way with the cult of the dead.



FIG. 10.—AMPHORA OF THE PALACE STYLE.



FIG. 10A.—AMPHORA OF THE PALACE STYLE.

(see *B.S.A.* vi. 25, vii. 51), and in the second year in the great external angle just outside the Eighth Magazine. The ware was seen at once to be native to Knossos, and Dr. Evans in his report points out that on those fragments 'the rosettes have an obvious relation to those of the fresco borders and stone-reliefs,' and that they 'are in fact taken over from the architectural frescoes and reliefs of the Palace.' Almost all of these fragments were found to belong to a large three-handled amphora of a type which must have been very much in vogue at the period to which they belong. The ware till quite recently was only known through isolated fragments from other sites. Now, however, a vase from a Mycenae tomb and fragments of another from the dromos of the Vaphio Tomb have been identified by Mr. J. H. Marshall as belonging to the same fabric, and as importations probably from Knossos (*B.S.A.* vii. 51). With the help of the Vaphio fragments Mr. Marshall has made a reconstruction, reproduced in Fig. 10, of the kind of amphora presupposed by the Knossos fragments.

Each succeeding season's excavations have added to the material for coming to a conclusion, and now there is so much at our disposal that it is possible not only to affirm the dominant influence of the style at Knossos during the best period, but also to trace the continuance of that influence into the period of decline. The amphora, Fig. 10a, from the excavations of 1902, illustrates the later more sketchy phase of the Palace Style. H. 77c. base d. 23c. shoulder d. 62c. rim d. 31c.

In all the pottery of this class belonging to the great period, the design is usually in a brilliantly lustrous brown-to-black glaze on a buff clay slip carefully polished by hand on terracotta clay, usually with black sand particles in it. The tint of the glaze varies from red-brown, where the glaze is laid on thin and the buff ground affects the tint, to black, where the glaze is laid on thick and the buff ground has no such effect. The surface effects are in turn locally varied through intentional irregularities in the firing that to begin with must have been accidental. Like most vessels of large size at Knossos the vases represented by the fragments in the grand Palace style are hand-made. For smaller classes of vessels the use of the wheel, as already in the Middle Minoan period, is of course universal.

Parallel with this more decorative 'quasi-architectonic' style there runs, as Dr. Evans has already pointed out (*ib.* 51), a more naturalistic style in which plant and animal forms appear repeating types in the scenes themselves, as distinguished from the merely architectonic framing and detail, of the wall-paintings. As is natural, both tendencies sometimes appear together on the one vase. The parallelism between the work of the potter and that of the fresco-painter is in this respect so close, that to account for it no further proof is required that the pottery in question was produced where the fresco itself was produced, that is to say, on the spot. Figs. 11, 12 show a series of fragments with naturalistic plant and flower designs which look as though they were taken over direct from the wall-paintings. Fig. 13 reproduces similar motives of distinctly later tendency. They are easily distinguished by a decline to a conventional short-hand method of rendering plant and flower



FIG. 11.

detail which becomes gradually more and more typical of the decadent period.³⁴

Equally typical of the Palace style, though apparently more rare than the



FIG. 12.

floral motives, are the representations of birds and fishes. See Fig. 14. These fishes and birds are brought into their true context for Knossos

³⁴ The conventional symmetry of arrangement in the case of Fig. 13, 2, goes back to Egyptian

models ; compare, for example, flower detail on painted pavement, Tell-el-Amarna Pl. II.

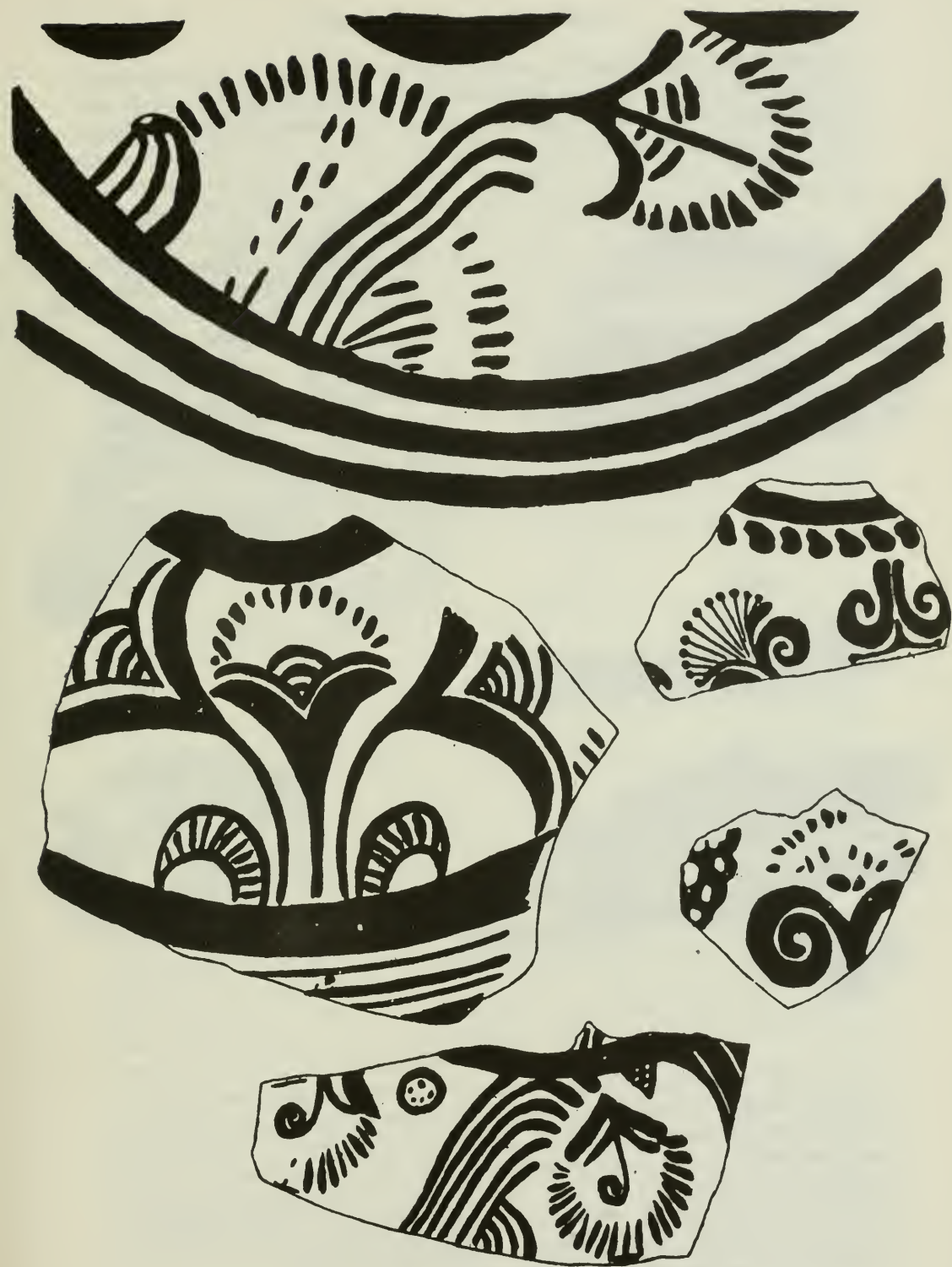


FIG. 13.

through the recent discovery in the Queen's Megaron of the remains of a grand fresco with fishes, and the still more interesting discovery in the same quarter of the palace of part of a fresco with birds of brilliant plumage partly in the flat, partly in low relief.³⁵



FIG. 14.

3. That the designs with floral motives and with birds and fishes continued in favour beyond the great Palace period at which in pottery as in wall-painting the rendering of such subjects is at its best, is shown by the conventional short-hand rendering of blossoms already apparent in the case of

³⁵ The birds and the fish (the latter also in fresco) recur in contemporary Melos (*B.S.A.* iv. Pl. II. p. 46) and Mycenae (F. and L. *Myk. Thongef.* ix.). Later examples from Sparta, F.

and L. *Myk. Vasen.* xvii. 111, Mycenae *ib.* xxxix. 402. The vase *ib.* xiv. 87 is from Crete, probably from Knossos.

the fragments reproduced Fig. 13, and those with birds Fig. 14, as well as the vase with fishes from Knossos (*Myk. Vas.* xiv. 87). This pottery, often classed as best Mycenaean, already belongs to the beginning of the decadent period. While pottery in the grand Palace style of Knossos is comparatively rare outside of Crete, the style of pottery which is most clearly characterized by its conventional rendering of foliage and flowers is found in a much wider context, embracing the whole of the East Mediterranean basin.

This decadent style at Knossos is typical of a period when the palace is only partially inhabited and probably is no longer a royal residence. The Bügelkanne which is rare in the great days of the palace is characteristic of this third period. It goes through the more naturalistic phase of decoration represented by the Knossian example with fish (*Myk. Vas.* xiv. 87) to the more summary rendering of marine subjects represented *ib.* 88, also from Knossos. At last, in the latest period of partial habitation, all of decoration that remains is in the shape of the occasional groups of horizontal bands, representing the architectonic frame-work of earlier design, in usually almost lustreless brown-black glaze on the pale yellow porous clay or clay slip which is typical of the latest period. In this latest period thousands of kylix-cups, amphorae and jars exist in this pale yellow clay without any decoration.

The perfectly uniform character of style in the Aegean area at this period is at once apparent on the comparison of wares from different centres. Thus the ware from Melos (*B.S.A.* iv. 47, v. 18, 19), Mycenae (F. and L. *Myk. Vas.* xxx.), from Ialysos (*ib.* i—x.), from Tell-el-Amarna in Egypt (Petrie, *Tell-el-Amarna* xxvi—xxx.) is perfectly identical with that of the same late period from Crete (F. and L. *ib.* xiii—xiv.). Further in one case, Melos, it is certain that all the 'Mycenaean' ware belonging to this period was imported into the island. Again we have the remarkable instance of the late 'Mycenaean' ware found in Egypt, all of which was imported. If we take the proved instances of importation into particular centres in connection with the perfect uniformity of style prevalent at this period at all the centres that come into account, the hypothesis of production at one centre becomes strengthened. Furtwängler and Loeschke with the evidence before them when they wrote, thought this centre must have been Mycenae. With the additional evidence before us now, taken in connection with the fact of ascertained importation into Melos and Egypt, it is more probable that this centre was Crete, to which Melos on the one hand and Egypt on the other are next-door neighbours on either side.

The true proof that Crete was the dominant influence in the creation of the so-called 'Mycenaean' style with monochrome design in lustrous black glaze on a light ground is, however, to be found in the fact that of all the Aegean centres of ceramic industry Crete alone possesses a glaze technique going back to the earliest use of paint in pottery.³⁶ From these earliest beginnings it is now possible, as we have seen, to trace the develop-

³⁶ The late neo-lithic painted ware from Thessaly hardly comes into this comparison.

ment of two tendencies in this medium to their culmination in an elaborate polychrome and an equally mature though less elaborate monochrome style, at a period when in the rest of the Aegean and its mainland periphery the use of lustreless paints without glaze was the order of the day. Thus at an epoch when elsewhere in the Aegean potters were still working in lustreless media without glaze, we find in Crete a monochrome style in lustrous glaze essentially 'Mycenaeen' in character already created alongside of the contemporary polychrome style.

We further found this parallelism of the two Cretan styles surviving into the early period of the Palace at Knossos, and it is only when the monochrome style of Knossos has come to its full maturity that we notice that its old time-honoured companion is no longer at its side. Thus though for reasons already stated we are not able as yet to trace out all the steps in the process by which the fully developed Knossian style was formed, we can be quite certain that the outcome is a result of a monochrome tendency that in Cretan ceramics was present from the very beginning of the use of paint, and that accordingly the mature style that emerges simultaneously with the lapse into latency of the sister style is the outcome of a genuinely native evolution. A further guarantee of native continuity is afforded by the parallelism with the evolution that took place in the history of wall-painting, for in fresco we have the same double tendency as in ceramics, of light design on a dark ground in competition with dark design on a light ground, surviving down into the great days of the Palace.³⁷ There is no doubt that the ceramic outcome in the great Palace period reflects a relation of the vase-painter to the wall-painter similar to that which held in the classical period of a much later time. Thus just as we have the highest fruition of Greek classical vase-painting going hand in hand with the development of an Attic school of fresco-painting, so in the earlier period Aegean ceramics received their most classical expression within the school of Knossian wall-painters. This classical expression for the Knossian potter was a monochrome style that was always essentially dark design on a light ground. The Attic potter goes through this stage also in his black-figured style but ultimately arrives at a monochrome style—the inverse of the other—in which the old technique with light design on a dark ground, that had sunk into neglect in the great Knossian period, is raised to new honour in the red-figured style, and is thus found in its own sphere to reflect the final triumph of a principle that must have received its most classical expression in the art of the Attic painters of the Epic Cycle.³⁸

³⁷ Thus, for example, in the *Journal of the R.I.B.A.* Vol. x. No. 4, the spiral design, Figs. 43 and 44, probably going back to time-honoured Minoan traditions of fresco-painting, are light on a dark ground. On the other hand the tailed spiral design, *ib.* Figs. 45 and 46, is dark on a light ground.

³⁸ In this connection the influence of relief-painting must have been paramount in the

fifth century B.C. That the Knossians also were not behind in such good example has been amply proved for us by the discovery of the remains of grand frescoes in low and high relief. We have also already seen that the Knossian potters themselves, under the influence of old traditions in vase-painting as in fresco-painting, were very near the solution of the old problem of a style in light design on a dark

The data for coming to fairly probable chronological conclusions are more abundant both at Knossos itself and elsewhere for the palace period than they were for the preceding age. Typical ware belonging to the early period of the Palace was found, as we have seen, to be identical with pottery characteristic of the Shaft-tombs at Mycenae, and it has been shown by Furtwängler (*Antike Gemmen*, III. 21) that early 'Mycenaean' swords like some found in the older Shaft-tombs (IV and V) were not only imported into but apparently imitated in Egypt towards the end of the Hyksos period. As throwing further light on these relations between Egypt and the Aegean at this period we must mention the fact that at Knossos in an early deposit of the later palace has been found the lid of an alabastron with the name of the Hyksos king Khyan.³⁹ To this general period of mutual influence between Egypt and the Aegean have to be referred the Shaft-tombs of Mycenae and the earlier pottery of the later palace at Knossos. This would make the older parts of this building go back to the end of the third or beginning of the second millennium B.C., while the pottery found by us on the corresponding floors would belong to the end of this general period or about 1800 B.C.

Again vases in stone and in earthenware as well as others represented in fresco belonging to the mature palace period succeeding the closing of the store-room chests are identical with vases apparently of metal carried by the Kefti people in Egyptian frescoes of the time of Thothmes III.⁴⁰ This is in harmony with other evidence that this mature period of the Palace at Knossos belongs roughly to the time of the XVIIIth. Dynasty in Egypt.

Further, the significance of the fact has been quite rightly pointed out—again by Furtwängler, *ib.* 17, and n. 4—that the 'Bügelkanne' does not appear on the Kefti wall-paintings and it seems to be rare in Egypt till Ramesside times. Thus the close of the XVIIIth. Dynasty represents for Knossos at any rate the beginning of the period of decline—amply evident in the kind of decadent pottery that regularly appears in the same context as the Bügelkanne not only at Knossos, as we have seen, but also in Egypt itself, as at Tell-el-Amarna and elsewhere.⁴¹ Most of this kind of pottery must belong to the period beginning roughly with the second half of the second millennium B.C.

It is significant of the probable tendency of events in this late period that the decline of Cretan pottery should be coincident with its attainment of universal currency over the Aegean. The first great chapter in the history of Aegean pottery ends here with the downfall of the Cretan sea-power and the decay of Cretan art.

The second chapter, not concerning us in this place, was ushered in by

ground in the manner of the red-figured Greek style. That this solution was not followed out was perhaps owing to the fact that the interest of the Cretan potter in human subjects was not so strongly developed as in the case of the Greek potter of a later time.

³⁹ *B.S.A.* vii. 66-67, where the date of the

lid is referred by Dr. Evans to the latter part of the nineteenth, or the beginning of the eighteenth century B.C.

⁴⁰ See *Asien u. Europa*, 348-9.

⁴¹ Petrie, *Tell-el-Amarna*, 17, Pls. XXVI-XXX.

events leading to the transference of influence in the East Mediterranean from the South to the North, from the sea-centre to the mainland periphery, from Crete to Ionia and Greece. From the point of view of ceramics, the one great heritage that the Greek world received from the sea-empire of Crete was the lustrous glaze medium and the traditions of style and technique, in survival or revival connected with its use. This process of survival, as recent researches have taught us, was much more marked in the East, where the new forces at work were less appreciable, than in the West, where alien influence was at its strongest. It is through the gradual grafting of more eastern or post-Cretan elements on more western or geometric that we can best understand the complex formation of an Attic style.⁴²

At Athens, after a prolonged period of rivalry between East and West, the old Cretan medium of lustrous black glaze is found to have become Hellenic and Classic in the course of the sixth and fifth centuries B.C. And with the old medium it is hardly surprising that old methods of technique should also have survived. Thus we probably have long surviving tradition rather than accident or re-invention in the fact that in the latter half of the sixth century B.C., the style with light design on a dark ground is found once more in competition with that having dark design on a light ground.

In this connection it will not be found possible to understand the whole development in its fulness unless we realize that the Attic fresco-painting of the sixth and fifth centuries B.C. in its turn goes back to traditions that had their beginning in the Minoan Art of Crete. Thus the red-figured style of light design on a dark ground with its revival of a principle which in Crete, as we have seen, is in origin as old as any use of paint in pottery, could hardly have emerged anew from the condition of latency into which it had sunk in the 'Mycenaean' Age, had the revival not gone hand in hand with the equally traditional example of the relief and fresco-painter. This technique was the basis on which an elaborate polychrome style in pottery had been developed in Minoan Crete alongside of the polychrome art of the fresco-painters. And had the colour-pigments been as durable in practical use for the potter as they were on the painted walls of Cretan palaces, the polychrome style in vase-painting would probably have survived in practical use also along with the black glaze ground which was always its essential foundation. In that case the Greek vases of the fifth century B.C. would have been as rich in polychrome harmony of colour as the frescoes of Polygnotos or the terracottas of Tanagra.⁴³

⁴² See Boehlau, *Aus Ionischen und Italischen Nekropolen*, pp. 52-124. Furtwängler, *Antike Gemmen*, iii. 14, who, however, goes quite against the evidence from Crete in assigning the first extended use of lustrous varnish not to Crete but to the Greek mainland.

⁴³ It is not surprising to find that there is apparently continuous local survival in the case of fabrics meant for cult or tomb-use. Thus

the polychrome ware of Naukratis, see *B.S.A.* v. 57-8. The geometric Aeolian ware found in Etrurian tombs, Boehlau *ib.* 91-2, Figs. 45-47. For actual survival of Minoan design-motives in post-Mycenaean times, see above, p. 179 and Boehlau *ib.* 65. Later examples are the white-figured lekythoi of Athens, and the polychrome amphorae of Italy.

Palace Pottery with representations of Shrine, Double-axe, and 'Horns of Consecration.'

One curious group of fragments belonging to the Palace period and style requires separate classification on account of the constant recurrence of a device which is all the more remarkable, because the device itself is of no purely decorative value from the point of view of the vase-painter. The device meant is the symbol of the Double-axe. Fragments with this symbol are grouped together from tracings on Fig. 15.⁴⁴ It must be at once apparent that the vase-painter in the case of those fragments could not have chosen for representation the Double-axe device because of the value for decorative purposes of the shapes and designs of bronze originals. If that were so we might equally expect the reproduction of other weapons such as inlaid shields or sword-sheaths like those from Mycenae. Far from this being the case the only weapon that ever appears in Knossian pottery is the Double-axe. Even in cases where the use of the Double-axe device on pottery may have become merely decorative, we have first to ask the question as to the cause of its representation at all, to the exclusion of all other weapons of the same class which might be cited as possible. Again in the unique case in question if the vase painter had merely had the design in view he would naturally have taken it over, in a combination suiting the surfaces at his disposal, without any necessity to take over as well the shape, for his purposes indifferent, of the object from which the design was copied. Where only the design is of interest the actual shape of the object on which the design to be copied occurs, if taken over as well, would become a positive hindrance to the proper utilization of the decorative motive from the point of view of the special kinds of surfaces the pottery has to deal with. The conclusion is that the object has evidently an interest of its own quite apart from any decorative value belonging to it either in itself or in relation to any design upon it regarded merely as design. And this interest is in an object which appears out of all connection with other objects except such as are regularly associated with it. In other cases those objects are either the 'Horns of Consecration' or the Shrine or both together. Now in the case of one of our fragments, No. 1, we have the Double-axe shown as set up between the 'Horns of Consecration,' in the case of another, No. 2, we have the same symbol set up in front of a building which in analogy with other instances can only be a shrine.⁴⁵ From the decorative point of view what was said of the Double-axe has to be said with equal emphasis of the 'Horns of Consecration' and with greater emphasis of the representation of any sort of building. The representation of buildings is so alien to the potter's art of this period that here

⁴⁴ For a fragment from Knossos with similar design restored, see *B.S.A.* vii. 52-3, Fig. 15, a.

see *J.H.S.* xxi. 136, Fig. 18. See also *ib.* 191, Fig. 65.

⁴⁵ Horns of Consecration on Sanctuary Wall,

again there can only be extraneous reasons for the representation. I think with Mr. Evans that these can only be sought in the realm of religious symbolism. That the Double-axe is meant as a religious symbol is a fact put beyond all doubt by the appearance of the building in the case



FIG. 15.

of one of the fragments. A shrine dedicated to the god of the Double-axe would have been distinguished from buildings dedicated to other divinities by the Double-axe set up in front of it, and again within upon the altar by that visible to the worshippers between the 'Horns

of Consecration'⁴⁶. The symbol representative of the power, and so of the divinity of the god, must to an Eteocretan have been as natural both without and within the shrine as to Christendom is the Cross—symbol of another victory—surmounting a Christian church and visible again within upon the altar.

DUNCAN MACKENZIE.

⁴⁶ Proof from real usage has been forthcoming this year with the discovery of a shrine with altar in the Palace at Knossos. The 'Horns of Consecration' were in their place upon the altar together with the sacred images. A small steatite

symbolical Double-axe was also found near the table of offerings, while between each pair of horns was the hole in which the shaft of a similar double-axe was fixed. See *B.S.A.* viii. 100.

NOTICES OF BOOKS.

Timotheos, Die Perser, aus einem Papyrus von Abusir im Auftrage der deutschen Orientgesellschaft herausgegeben von ULRICH VON WILAMOWITZ-MÖLLENDORFF. Pp. 126. Mit einer Lichtdrucktafel. Leipzig: Hinrichs, 1903. 3 m.

THE appearance of an *editio princeps* of a newly discovered Greek poet is an event the importance of which needs no emphasising. The papyrus here edited by Prof. von Wilamowitz-Möllerndorff, found during the excavation of an old Egyptian site near Memphis, gives us at once the earliest extant Greek manuscript and a first substantial knowledge of the poet Timotheus of Miletus. The objects found with the papyrus indicate a date not much after the middle of the 4th century B.C., and the archaic character of the script is quite in accordance with this evidence. The poem originally occupied six broad columns (29 to 26 lines in each, written continuously, without verse-division), of which one is almost wholly lost, the second is badly mutilated, and the last four are intact. The editor's arrangement of it in short verses gives a length of 253 lines to the part preserved. As to its identity there is no doubt, for in the concluding section the author names himself, and refers to his predecessors in his art and the criticisms passed upon his innovations—criticisms with which we were already acquainted from the comic poet Pherecrates; and the subject is a naval defeat of the Persians by the Greeks, evidently that of Salamis, though no name, of place or person, occurs in it. Hence it is evidently the *νόμος* of the *Persae*, which we know from Plutarch to have been popular at the time of Agesilaus' campaigns in Asia Minor, to which date its composition probably belongs. It is therefore a specimen of a class of poem hitherto unknown to us, the *νόμος*. It also represents a new literary school. Its characteristics are an excessive use of metaphor, of which the phrase "*Ἀρεως φιάλη*, meaning a shield, quoted by Aristotle (*Poet.* 1457 b 22) is quite a moderate example. The poem has neither historical nor ethical interest; it is purely an exercise in poetic diction, of great interest to us as an example of a new stage of Greek artistic development, but not intrinsically of high literary merit. So tortured is the language that Prof. von Wilamowitz-Möllerndorff finds it impossible to translate it into any modern language, but gives instead a Greek paraphrase, after the manner of the scholiasts. He also gives a full discussion of the metre, character, and contents of the poem, and, in short, provides everything that an *editio princeps* should have to enable the reader properly to appreciate the new discovery. A separate *facsimile* edition of the papyrus is also published (at 12 marks), containing seven photographic plates, the editor's restored text, and a short introduction.

The Tebtunis Papyri, Part I.; edited by B. P. GRENFELL, A. S. HUNT, and J. G. SMYLY. Pp. xix + 674; with 9 plates. London and New York: Frowde, 1902. £2 5s. net.

This large volume, published alike for the University of California (which financed the expedition and owns the papyri), and the Graeco-Roman branch of the Egypt Exploration Fund, which lent the services (previously pledged to them) of Messrs. Grenfell and Hunt,

gives a first instalment of the papyri found at Tebtunis in the winter of 1899-1900. This section deals with the papyri from the cemetery of mummied crocodiles, some of which animals were found to be wrapped in, or stuffed with, rolls of papyri, many of them of great length. The date of all the texts here printed lies between 150 and about 60 B.C. Only four are literary; two containing short lyrical excerpts from unknown authors, while one is a fragment of a collection of epigrams, and another contains portions of Homer *Il.* II., 95-210, with several critical signs. The bulk of the volume, however, is composed of official documents, notably those of the *κωμογραμματεὺς* of the village of Kerkeosiris, giving elaborate details with regard to the distribution of crops in the village land, and the revenues derived therefrom. The *data* are summarised in a valuable appendix, which gives a clear statement of the various classes of land tenure in the Fayum (*γῆ βασιλική, ἱερά, κληρουχική*, and certain smaller categories), and the revenues drawn from them for the state, and throws considerable light on the manner in which military settlers (*κάτοικοι* and others) were planted on the land by the government. A second appendix deals with the vexed question of the ratio between silver and copper under the Ptolemies, subverting the old belief in a ratio of 120 : 1, by producing clear instances of conversion of silver into copper drachmae at rates from 500 : 1 to 375 : 1. It is consequently maintained that the notion of an equality of weight between silver and copper drachmae must be given up, and a theory of Regling's is adopted which gives a weight of from 15 to 20 grammes to a coin of 80 copper drachmae, and consequently a ratio of value between silver and copper of, approximately, 30 : 1. These two appendices contain the gist of the whole volume, but there is a multitude of detail in it which will be essential to the student of Ptolemaic economics.

The Republic of Plato, edited with critical notes, commentary, and appendices, by JAMES ADAM. Vol. I., Books I.—V., pp. xvi + 364, 15s.; Vol. II. Books VI.—X. and Indexes, pp. vi + 532. Cambridge University Press: 1902. 18s.

This is a full critical and explanatory edition of the Republic, similar in scale to that of Jowett and Campbell. The text is based primarily, as is natural, on Parisinus A (which Mr. Adam has re-collated for himself), the next MS. in authority being Venetus II, then Venetus Ξ and Monacensis *q*, then Angelicus *v*. The commentary aims at being objective and impersonal, based on a close study of Plato's own writings and those of his contemporaries, and striving to exclude interpretations in the light of subsequent philosophy. The indices include a classified list of errors in the MSS., which will be useful to palaeographers, and a table of the conjectural readings adopted in the text (94 in all, of which 30 are due to Mr. Adam himself). Among the appendices is a full examination of "Plato's Number," of which subject Mr. Adam has made a special study. A volume of prolegomena is promised to complete the edition.

ΑΡΙΣΤΟΦΑΝΟΥΣ ΚΩΜΩΙΔΙΑΙ. *Facsimile* of the Codex Venetus Marcianus 474; with a preface by J. WILLIAMS WHITE, and an introduction by T. W. ALLEN. Pp. 23 + 344. London and Boston: [printed for the Archaeological Institute of America, and the Society for the Promotion of Hellenic Studies], 1902. In portfolio, £6; half morocco, £6 6s.

This volume contains a complete collotype *facsimile* of the Codex Venetus of Aristophanes, comprising the seven dramas—*Plutus, Clouds, Frogs, Knights, Birds, Peace, Wasps*—with a short preface by Prof. White, of Harvard, explaining the purpose of the publication, and a full palaeographical introduction by Mr. Allen. The Codex Venetus was preferred to the Ravennas on the ground that it is less well known, and while in text the Venetus is not inferior to its rival, its scholia are unquestionably superior, and are of essential

importance for the criticism of Aristophanes. Mr. Allen assigns the MS. to the 11th century, and gives full details as to the work of the several scribes and correctors, and the arrangement of the scholia. The photographs, which have been minutely compared with the original by Prof. Lionello Levi, are clear and good.

The Argive Heraeum. By CHARLES WALDSTEIN. Vol. I. General Introduction, Geology, Architecture, Marble Statuary, and Inscriptions. [Archaeological Institute of America: American School of Classical Studies at Athens.] Pp. xix + 231. 41 plates and many illustrations. Boston and New York: Houghton, Mifflin, & Co., 1902. £3 7s. 6d.

This work, which is to be completed in two volumes, is the definitive publication of the results of the excavations of the American School at Athens, on the site of the Argive Heraeum (1892—4). Ten gentlemen are named on the title-page as coöperating with Dr. Waldstein, but those who take part in the present volume are four. Mr. H. S. Washington describes the geology of the neighbourhood, especially as bearing on the excavations. Mr. E. L. Tilton supplies an elaborate account of the architectural remains, of which the most important are the successive temples. Of the first, the traces are scanty, and the restoration is conjectural. The data for reconstructing the second temple are fairly complete. The inscriptions on stone and clay are published and discussed by Messrs. R. B. Richardson and J. R. Wheeler. The remainder of the volume is contributed by the principal author, Dr. Waldstein. A general Introduction discusses the cult of the Argive Hera; the topography of the site; the ancient authorities relating to the temple and its statue; the history of the Heraeum in legendary and historical times; the evidence of the finds as bearing on the general questions of history; the history of previous excavations, by General Gordon of Cairness in 1831—6, and by Rangabé in 1853; the history of the excavations by the American School in three successive years (1892—4). In a chapter on the marble statuary from the Heraeum, the sculptural remains are fully discussed. Of these the most important and numerous are the architectural sculptures from the Second Temple. Dr. Waldstein argues that they are homogeneous in style, and that they were produced about 420 B.C. under the immediate superintendence of Polykleitus.

Ancient Athens. By ERNEST ARTHUR GARDNER. Pp. 579; with maps, plans, and illustrations. London: Macmillan & Co., 1902. 21s. net.

The above work is a descriptive account of Ancient Athens, with special reference to the remains extant *in situ*. The treatment is in the main topographical, but the topography is considered in relation to the successive historical periods. Thus, after a general account of the site, the natural features, the rivers and water supply, and the principal building materials employed, the author discusses the walls and gates; the Acropolis before the Persian wars; the town at the same early period; the Acropolis in the fifth century, more particularly the Parthenon and other Acropolis buildings; the public buildings in the neighbourhood of the Acropolis of the fifth and fourth centuries; the monuments of the Ceramicus, and the remains of Hellenistic and Roman Athens. Chapters follow on the route of Pausanias in Athens, and on the topography of the Piræus.

By a slight but not illegitimate extension of the scope of the book, early Attic art in general and the art of the sepulchral reliefs are somewhat fully discussed as well as the works more strictly associated with the architecture and topography of the town.

The book is illustrated with numerous views, in many cases taken from unfamiliar standpoints (but sometimes too small to show the details satisfactorily), with architectural drawings for the most part the work of the late Prof. Middleton (and published in the 3rd Supplementary Paper of the Hellenic Society), and with an excellent map, having a transparent sheet superimposed to show the ancient remains in isolation.

Griechische Vasenmalerei: Auswahl hervorragender Vasenbilder. By A. FURTWÄNGLER and K. REICHOLD. Parts i.-iv. With 40 plates. Munich: F. Bruckmann, 1900-1902. Each 40 m.

Aided by a fund at the disposal of the Bavarian *Akademie der Wissenschaften*, Prof. Furtwängler is emulating the example of the early nineteenth-century savants, such as Millin and Millingen, who gave to the world sumptuous volumes in which vase-paintings were reproduced with the best results then possible. It is needless to say that the work under consideration is far in advance of its predecessors as regards scientific accuracy, no expense having been spared to make the illustrations the standard reproductions of the subjects. Herr Reichhold, to whom this part of the work is due, is not only a most accomplished draughtsman, but thoroughly conversant with the technical aspects of vase-painting, as may be seen from the valuable notes he has appended to the descriptions of the plates.

The work will be completed (for the present) in six parts, but it has been thought well to give a preliminary notice of those issued up to date, which comprise forty plates, illustrating 29 vases. Of these no less than six are devoted to a complete reproduction of the François-vase, including separate enlargements of details—a much-needed work, and one that has become especially valuable in view of the recent catastrophe which befell the vase. Two other early black-figured vases are given, all the rest being red-figured. Among the latter are three cups of Euphronios, those in the British Museum, the Louvre, and Munich; the 'Iliupersis' cup of Brygos and the 'Vivenzio' hydria in Naples with the same subject; the magnificent Talos vase in the Jatta collection, and the equally magnificent Amazonomachia krater at Naples; the Meidias hydria in the British Museum; and a fine 'bilingual' amphora in Munich, probably by Andokides. The rest are chiefly large red-figured vases of the 'fine' style of 450-420 B.C., but all may be described as *chef-d'œuvre*. All the drawings are reproduced in phototype except two which are in colour. Six vases are entirely new publications, and several others, such as the Meidias vase, have never before been satisfactorily reproduced.

Catalogue des Vases Peints du Musée National d'Athènes. By M. COLLIGNON and L. COUVE. [Bibliothèque des Écoles Françaises, Fasc. 85]. Pp. xii+672. Paris: Thorin et Fils, 1902. 25 f.

This latest addition to the growing series of up-to-date Vase Catalogues describes the collections in the National Museum at Athens, with the exception of the Acropolis fragments, on which Drs. Wolters and Graef are at work, and some of the later Greek vases with reliefs or moulded in the form of figures. No less than 1988 vases are described in detail, classified according to date and fabric, with full information as to provenance, technique, and bibliographical references. The earlier black-figured fabrics of Corinth and Ionia are not classified with the scientific discrimination that we are entitled to demand at the present day, and the arrangement of some of the primitive wares is apt to be misleading; but the actual descriptions of the vases are quite adequate. A supplement with indexes has since been issued, and it is understood that the absence of illustrations to the Catalogue is to be atoned for by the subsequent publication of an Atlas like those of the Louvre Collection. This certainly seems a necessity for a collection containing so many unique vases, and fabrics that are entirely unrepresented in the European collections. One of the principal features of the Athens collection is the magnificent series of white lekythi, those with funeral subjects alone numbering no less than 184. Many of those found in Eretria have subjects of special interest. The ordinary B.F. and R.F. fabrics are adequately represented, and in such variety as to dispose for ever of the old notions of an Italian origin for these vases. Artists' signatures are rare, but the names of Euergetes, Pamphaios, and Phintias occur, among others.

Catalogue des Vases Peints de la Bibliothèque Nationale. By A. DE RIDDER. 2 vols. Pp. 710. Thirty-four plates and 150 text illustrations. Paris: Leroux 1901-1903. 60 f.

This work, now just completed, gives a full description of the collection of nearly 1300 vases in the National Library at Paris. The finest specimens, such as the Arkesilas cup, have already been adequately illustrated in the Atlas of MM. Milliet and Giraudon, but the admirable photographic plates and text-drawings of these two volumes serve to complete the publication of all the more interesting vases in the collection. The first volume, dealing with the early and B.F. vases, describes 356, including the fine Chalcidian and Cyrenaic specimens, and the vase of Amasis with Athena and Poseidon; the rest are mainly Attic R.F., of average merit, with very few *chefs d'œuvre*. They include plates by Epiktetos, the Dolon cup of Euphronios, and the fine cup signed by Kleophrades and Amasis II. There is a preface with historical account of the collection, and full indices are also given.

Klassisch-Antike goldschmiedearbeiten im Besitze Sr. Excellenz A. J. von Nelidow. Beschr. und erl. von LUDWIG POLLAK. Pp. 198. 20 Tafeln in Farbendruck, 37 text-illustrationen u. vignetten. Leipzig: Hiersemann, 1903. 80 m.

Dr. Pollak, the compiler of this important catalogue of gold ornaments, has chosen for it a title sufficiently comprehensive to include not only the direct products of Greek art, as exercised in Greece, but everything made under its inspiration in the Greek colonies of Asia Minor, Syria, Egypt, Macedonia, the shores of the Euxine and Aegean seas and the Aegean islands. His justification is to be found, both in the nature of the famous Nelidow collection and the circumstances under which it has been formed.

M. de Nelidow acquired his treasures entirely by purchase (about one-fourth from the Whittall collection, Constantinople,) and almost entirely in Greece and the Ottoman Empire, so that though the bulk of it is pure Greek work, there are some objects, such as a Lydian pectoral (Plate XVI.), a Hittite statuette (No. 511), and a Perso-Greek necklace (Pl. XIII.), which show strong local influence, while others, such as the Syrian earrings (Nos. 298, 299), show an Oriental idea run into a Greek mould. The provenance attached to the objects shows where they were bought, not their reputed place of origin, but by careful comparison with others of authenticated pedigree, Herr Pollak has been able to arrive at a reasonable certainty in the matter. The collection contains 561 objects and the basis of classification adopted is a chronological and historical one—the earrings, 269 in number, are further subdivided into two main groups, according as the idea underlying the design is a representation of an actual thing, *i.e.* a head—human, allegorical, animal, etc.; or a purely ornamental form. In this connexion Herr Pollak observes that in the earliest Greek jewellery the material is entirely subordinate to the design, and colour (stones or enamel) is only used to enhance its beauty, whereas in late Hellenistic work the design is merely a means to show off the stones—a phase which, in sculpture, finds its parallel in the Paphos reliefs.

The difficulty of a chronological classification lies in the fact that while we know most about the ornament of the fourth and fifth century B.C., the majority of extant gold ornaments date from Hellenistic times, which Herr Pollak subdivides as follows: Early Hellenistic *circa* 150 B.C.; Hellenistic, *circa* 100 B.C.; and Late Hellenistic, up to the end of classical times; the word 'Roman' he carefully avoids, because the gold ornaments of the period found in Italy (*cf.* the earrings 298, 299) are probably importations from Syria.

The whole collection is so important that it is difficult to single out any special object, but the Lydian pectoral (Plate XVI.), a beautiful fourth century funeral gold wreath from Mytilene (Plate I.), and a sixth century death-mask from Sidon (Plate VII.) found with diadem No. 11, are exceptionally important. The earrings are all picked specimens,

and it is to be regretted that the plates (from photographs) do so little justice to their delicate workmanship—cf. the lynx-head earrings 157 *sqq.* An unpublished bronze (Alexander with a lance) is given as a tail-piece on pp. 139, 184.

Kleinasiatische Münzen. Band II. Von F. IMHOOF-BLUMER. [Sonderschriften des österr. archäol. Institutes in Wien. Band III.]. Pp. 275, with 11 photographic plates. Vienna: Höhler, 1902. 36 m.

This book is of capital importance not only for numismatists but also for all students of the history and geography of Asia Minor. The ground covered by the second volume extends from Lycia to Cappadocia; the districts which are treated at greatest length are Pamphylia, Pisidia, and Cilicia. Besides publishing many new varieties of coins, the author supplies numerous corrections of previous descriptions, readings, and attributions. The sections dealing with Aspendus, Selge, and Side are specially interesting, while not a little fresh light is thrown on the satrapal coinage. In connexion with the latter point it may be noted that Imhoof pronounces against the possibility of identifying the portraits of individual satraps from the money they issued, holding that the heads which appear upon their coins merely represent an ideal type, varied according to the caprice of the die-cutter. Not much addition is made to our knowledge of the Selucid period, beyond the probable suggestion that Seleucia ad Calycadnum was a mint of Antiochus VIII. and of Seleucus VI. The list of value-marks occurring on Greek imperial pieces is considerably extended. Malos (Pisidia) and Airai (Ionia) take their places for the first time among the cities that are known to have struck money. On the other hand, Amelas (Lycia) disappears from the list. Hitherto no coins have been assigned to the Cilician Aphrodisias, but a strong case is here made out for attributing to that important town two distinct groups of uninscribed silver pieces (the series with the baetyl formerly given to Mallos, and that with Athena Parthenos and Aphrodite seated between sphinxes formerly given to Nagidos), as well as a unique colonial coin. The discussion of the puzzling coin-types of Etenna is a characteristic example of the masterly way in which difficult problems are handled. Out of the total number of 275 pages, 31 are devoted to additions to Volume I., and 48 to a singularly complete set of indexes which cover both volumes. The photographic plates reach the highest level of excellence.

L'Histoire par les monnaies. Essais de numismatique ancienne. Par THÉODORE REINACH. Pp. iv+272; with 6 photographic plates, and 20 cuts in the text. Paris: Ernest Leroux, 1902. 10 f.

M. Reinach has revised and reprinted in this convenient form the more important of the articles contributed by him to various periodicals during the past fifteen years. The range of subjects covered is a wide one, and many points of historical interest are touched upon. Special mention may be made of the essays that deal with the relative value of the precious metals in antiquity, with the genealogy of the Kings of Pontus, with the recently discovered addition to the royal line of Bithynia, and with the dynasties of Commagene. Elsewhere the artists 'Acragas' and 'Daïdalos of Bithynia' are satisfactorily disposed of as mere myths, Pliny being made responsible for the former, and Pliny's editors for the latter. The papers included in the volume number 25 in all. There is no index.

A Catalogue of the Greek Coins in the British Museum: The Coins of Parthia. By WARWICK WROTH. Pp. lxxxviii+289; with map and 37 photographic plates. London: Printed by Order of the Trustees, 1903. 25s.

This volume (the twenty-third of the series) is devoted to one of the most obscure and difficult sections of Greek numismatics. Twenty-five years have passed since Gardner

published his *Parthian Coinage*. In the interval, so many new coins have been recorded that Mr. Wroth has found it necessary to attack the question of classification *de novo*. His introduction gives a clear summary of the little that is certainly known of the story of the Arsacidae, and a full discussion of the reasons that have guided him in distributing the coins among the various monarchs. While the arrangement makes no claim to absolute finality, it undoubtedly marks a very great advance. It is mainly in regard to the earlier reigns that the new classification differs from the old. The discovery of a dated tetradrachm has shown that a drachm formerly assigned to Phriapatius really belongs to Artabanus I. This entails numerous changes, including the transference to Mithradates II. of the coins hitherto attributed to Mithradates I. Attention may be called to the interesting tables proving the existence of contemporaneous rulers, each laying claim to the kingship. Separate sections of the Introduction deal with the denominations and weight, the dates, the types, and the epigraphy of the Parthian coinage. The monograms and symbols are also analysed with the view of seeing how far they furnish a clue to the mints; the results are here chiefly negative. The photographic plates are good. The Indexes and Tables are on an even more complete scale than usual.

Coins of Ancient Sicily. By G. F. HILL. Pp. ix+256; with 16 photographic plates, eighty illustrations in the text, and a Map. London: Constable and Co., 1903. 21s. net.

This book is intended for the general student rather than for the specialist in numismatics. It aims at giving a complete sketch of the coinage of Sicily from the earliest period down to Roman times. The coins for illustration have been most carefully chosen. A short Appendix deals with the issues of Malta and Pantellaria. There are two indexes and a very useful 'select bibliography.' The plates are very good.

Prosopographia Attica. Edidit IOH. KIRCHNER. Vol. II. Pp. vii+660. Berlin: Reimer, 1903. 28 m.

This second volume (completing the work) contains the names from Λ to Ω , a conspectus of names arranged under demes, tables of the archons from 683/2 B.C., and an index of the inscriptions in which gaps have been filled in this work. The whole work is a complete and invaluable lexicon of the names of Athenians (including aliens who received the citizenship) down to the time of Augustus. It contains also some useful stemmata of the more important families. The use of it is somewhat hindered by the nature of the fount which has been employed for the headings of the articles.

Paulys Real-Encyclopädie der classischen Altertumswissenschaft. New Ed. by G. WISSOWA. Supplement. Part I. Pp. vi+columns 374. 1 Plan. Stuttgart: Metzler, 1903. 5 m.

The first part of this supplement contains additions and corrections to the first four volumes already published, including articles 'Athenai' (61 columns) by Wachsmuth, 'Civitas' (17 columns) by Kornemann, and 'Demokratia' (28 columns) by v. Schoeffer.

A Popular Handbook to the Greek and Roman Antiquities in the British Museum. By E. T. COOK. Pp. xxii+794. 2 plans. London: Macmillan, 1903. 10s.

This guide to the galleries of the Department of Greek and Roman Antiquities (with which are included the Gold Ornament Room, the Romano-British Room, and the

Exhibitions of the Coins of the Ancients) is a compilation for which not only the official publications, but a very large number of other books and periodicals, have been laid under contribution.

The House of Seleucus. By E. R. BEVAN. 2 vols. Pp. vii+330, 333. 6 plates and 3 maps. London: Arnold, 1902. 30s.

This is a monograph not merely on the regal history of the Seleucidae, but on Hellenism in the provinces which were contained in their Empire. Apart from its readable style, it is indispensable as a collection of material, especially for the period from the beginning of the second century which is not covered by Droysen and Niese. The epigraphic evidence has been most carefully utilized, and the same is true of the numismatic authorities, especially as concerns the most important series, viz., the coins of the kings. A great deal of valuable material relating to the eastern provinces of the Empire is also to be found in the book, which takes rank among the first authorities on the history of the period, as indeed it is practically the only complete monograph on Seleucid history. The plates illustrate a series of the regal coins and a marble head in the Louvre (Arndt. 103, 104), which is with some probability regarded as a portrait of Antiochus III. There is a very full index.

Études sur l'Histoire de Milet et du Didymeion. By B. HAUSSOULLIER. [Bibliothèque de l'École des Hautes Études.] Pp. x+323. Bouillon: Paris, 1902.

M. Haussoullier's work contains twelve chapters (of which six have already appeared in the *Revue de Philologie*, while the rest are entirely new); they are preceded by a collection of the ancient texts relating to Didyma and the Didymeion. The subject is treated in three parts corresponding to the Macedonian, the Seleucid, and the Roman periods, bringing the history down to the end of the first century after Christ. The first temple, burnt by Darius, is not dealt with. The special feature of the book is the elaborate treatment which is accorded to the epigraphic material, much of it previously unpublished, and nearly all of great historical importance, especially for the Seleucid period. The book is well indexed.

Eileithyia. By PAUL BAUR. [University of Missouri Studies, Vol. I., No. 4.] Pp. vi+90. Univ. of Missouri, 1902. \$1.00.

This tract sets out with an attempt to prove that the primitive idols of the 'Island' and 'Brettidole' types, and a series of 'Mycenaean' and 'post-Mycenaean' statuettes, represent an early 'goddess of generation and childbirth.' But the author fails to recognise two facts which tell against his argument: (1) the accentuation of sexual organs, which, he thinks, typified her character, was for primitive art the only available way of indicating sex, and (2) specialisation of the functions of deities is utterly foreign to the period in question. Two chapters on Sanctuaries of Eileithyia and her Representation in Art are followed by one dealing fully with 'Votive Offerings to Deities of Childbirth.' The point Mr. Baur raises in connexion with masks of Eileithyia lately found in her Grotto at Paros, which he suggests had some cult-use similar to the ceremonial wearing of the Demeter-mask at Pheneos (Paus. viii. 15), seems well worth developing further. As a contribution to mythology, the treatise suffers from the prevailing tendency to use ancient authorities merely as a 'literary supplement' to the monuments.

The Sculptures of the Parthenon. By A. S. MURRAY. Pp. xii+173. 17 Plates, &c. London: John Murray, 1903. £1 1s.

This discussion of the sculptures of the Parthenon is based on a course of lectures addressed to students of the Royal Academy, and is planned 'on artistic more than on archaeological

lines.' In conformity with its purpose, controverted questions, such as those of nomenclature and interpretation, are touched on lightly. The author deals mainly with the artistic and aesthetic questions involved, and with details of sculptural treatment calculated to interest practising students of art. The principal subjects discussed in succession are: the general conditions determining the character of the different sculptures; the composition of the pediments; the composition and treatment of the metopes; the frieze, considered as to its general scheme, and with reference to details of execution; the *Athenè Parthenos*. A concluding chapter takes the reader along the frieze, pointing out the characteristics of each slab.

The plates give the most important extant sculptures, and the most necessary selections from the MS. sources. In particular, a folding plate, six feet long, contained in a pocket, gives a photographic reproduction of the frieze, 1½ inches high, substantially as it stands in the Elgin Room. Excerpts from Carrey's drawings are also added, which the reader can place if he wishes, by means of the slab-numbers. The nomenclature of Prof. Michaelis is employed throughout.

Die Insel Cyprien, eine Landeskunde auf historischer Grundlage. By E. OBERHUMMER. 1^{ter} Teil. Quellenkunde und Naturbeschreibung. 3 maps, geological section, and 8 maps in text. Pp. xvi+488. München: Ackermann. 12 m.

This is the first volume of a work in which the author's aim appears to be to give a picture, first of the natural conditions of the island with all the alterations which they have undergone in the course of centuries, with or without the help of man, next of the historical development of man himself in the island. It is in fact a historical geography in the fullest sense of the word. The volume begins with an abstract of the Oriental literary and epigraphic sources of our knowledge of the island (the Phœnician and Cypriote inscriptions are not more than referred to). This is followed by sections (always dealing with the subject from the point of view of historic development) on the name of the island, its geographical position, geology and physical geography, climate, mineral products, flora and fauna, and the older maps; a bibliography (in some points supplementing, in others to be supplemented by Cobham's work), and an index (which includes references to all the author's other writings on the same subject). The anthropo-geographical portion is reserved for the second part.

Die nicht menschengestaltigen Götter der Griechen. By M. W. DE VISSER. Pp. x+272. Leyden: E. J. Brill, 1903. 5 m.

Dr. de Visser holds that the mainspring of all worship of stocks, stones, trees, and animals is the belief that they have souls, or at least are indwelt by spirits. Symbolism, in his view, played no part in primitive religion, the key to which must be sought in the study of existing savage custom and myth. But in order to compare with these the dark origins of Hellenic religion, we must set out with a thorough examination and classification of the vestiges of non-anthropomorphic worships which it retained. This task is admirably performed in the present work. The immense mass of sources, literary and artistic, is exhibited under the main headings of Stone, Stock, Tree, and Animal Cults, each of which is subdivided according to four carefully defined stages in the 'freeing' of the numen from the material object, a process which corresponded with the growth of anthropomorphism.

For purposes of reference, these 'categories' are excellently chosen, but as regards the later stages, we may doubt whether many of the examples given are really survivals; whether *Hermes Kriophoros*, for instance, was ever a ram, or *Athena Hippias* a horse.

The author has not of course attempted to solve the manifold problems connected with his subject-matter; on several points he originates or quotes illuminating comments, but save as a warning, we could dispense with the notices of dead and dying hypotheses which he has prefixed to his treasury of facts. Four indices, two being typographical, and a bibliography of modern authorities, complete the usefulness of the work.

Der Seelenvogel in der alten Litteratur und Kunst. By GEORG WEICKER.
Pp. 218. 103 illustrations in text. Leipzig: Teubner, 1902. 28 m.

The first part of this work deals with the literary evidence for the author's thesis that the Sirens are departed souls in bird-form; the rest is an elaborate study of the Siren or Harpy type in Art, which, in his view, expresses the primitive conception of the Soul as a bird. Along with undeniable proofs that this conception was widespread in Greece, we are given combinations so far-fetched as to weaken the effect of the argument. The 'twittering' of Homeric shades, the familiar 'O for the wings of a dove' aspiration of tragic choruses, in fact any and every allusion to birds, down to the feathers that fill the Hyperborean sky, is forced into connexion with the bird-shape of the soul. The author relies throughout on the Ghost-hypothesis which is the *dernier cri* in mythology. Not only Sirens and all their weird kindred, but the whole race of Nymphs are spirits of the dead! Yet if for primitive man, the tree, the fountain, the uncanny-looking rock, has a soul of its own, non-human spirits must, one thinks, play no small part in his myths. And if Nymphs and Sirens were simply ghosts, whence the popular belief that though they lived longer than men, they died and were buried? The Sirens of the Odyssey seem to us to belong to a very different category from that in which Dr. Weicker places them; their home is surely not Hades but Wonderland, and primitive religious beliefs had as little to do with them as with the Laestrygons or the Cyclopes. Homer admittedly gives no hint of their bird-form; why and when they acquired it in later Art remains an unsolved problem.

The book's value as a history of a fascinating artistic conception is enhanced by its wealth of references and illustrations. Almost half the latter are from unpublished monuments.

The Harmonics of Aristoxenus. Edited with Translation, Notes, Introduction, and Index of Words. By HENRY S. MACRAN, M.A. Pp. iv+303. Oxford: Clarendon Press, 1902. 10s 6d. net.

An original contribution to the theory of Greek music, comprising (1) the Greek text of the *Ἀρμονικὰ Στοιχεῖα* with critical apparatus, (2) a commentary, (3) an introduction on the development of Greek music, in which Professor Macran states his own explanation of the Greek systems, and briefly criticises two alternative hypotheses. The thesis is laid down dogmatically in the introduction, and the arguments in support of it supplied in the notes; it can only be briefly indicated here. The units of Greek music are the tetrachords, and the three ancient harmonies result from different methods of combining the tetrachords, whether by conjunction (Ionian), disjunction (Dorian), or alternate conjunction and disjunction (Aeolian); while with regard to the scales (Lydian, Phrygian, etc.), the essence of each lay in the position of its tonic in relation to its other notes. This, in Professor Macran's view, explains the attribution of a special *ῥθος* to each scale, since the melodies composed in it would (in the absence of harmony) necessarily gather round the tonic, and so be high- or low-pitched according to the position of the tonic in the scale.

The following books have also been received:—

Ancient Greek Coins [Reprinted from the *American Journal of Numismatics*].
By F. SHERMAN BENSON. Vol. II. Parts V.—X. Syracuse. Pp. 81. Plates V.—X.
Privately Printed. 1901–2.

A Short History of the Ancient Greek Sculptors. By H. EDITH LEGG.
With Introduction by Prof. P. Gardner. Pp. xii+267. Illustrations. London: Fisher Unwin, 1903. 6s.

Ὁ Ἐφεβος τῶν Ἀντικυθέρων. Συμβολὴ εἰς τὴν ἱστορίαν τῆς Ἑλληνικῆς Πλαστικῆς. ὑπὸ
Α. Σ. Ἀρβανιτοπούλλου. Pp. 42. Illustrations. Athens: 1903.

Ithaca or Leucas? [University of Missouri Studies. Vol. II. No. 1]. By W. G. MANLY. Pp. 52. 4 plans. University of Missouri. 1903. \$1.00.

Augustus; the Life and Times of the Founder of the Roman Empire (B.C. 63-A.D. 14). By E. S. SHUCKBURGH. Pp. xii+318. 9 Plates. London: Fisher Unwin, 1903. 16s.

The Athenian Drama. Translations of: (1) **The Oresteia of Aeschylus.** By G. C. W. WARR. Pp. liii+220. 13 plates. 1900—(2) **Sophocles.** By J. S. PHILLIMORE. Pp. lxxxvi+215. 9 plates. 1902.—(3) **Euripides.** By G. MURRAY. Pp. lxviii+355. 7 plates. 1902. London: Allen. 7s. 6d. each net.

THE STATUES FROM CERIGOTTO.¹

[PLATES VIII., IX.]

I. THE bronze Hermes recovered from the wreck off Cerigotto is one of those works which must be judged from internal evidence alone: no reference to it has as yet been found in the ancient authors, we have no hint as to the city from which it originally came, no inscription to give us a clue to the name of the artist.

It is at once apparent that the style shows no trace of severity, much less of archaism. It is therefore by some considered to be a work of the 4th century. The figure is rather above life size; it represents a young man, nude, resting the main weight of the body on the left leg while his right is slightly bent: there is however no forward motion suggested, the Hermes is standing with a somewhat languid grace. The right arm is raised and is extended half outwards, half sideways, while the head is also turned a little towards the right, thus displaying the muscles of the neck (see *J.H.S.* vol. XXIII. Pl. IX.) The left hand may have held a caduceus, which would dispel any doubt as to identification, but apart from such an attribute the whole character and treatment of the face seem to suggest a God and not a human athlete. The indications of a violent and passionate nature which Scopas used with such effect are smoothed over or fined away, while in the features and expression the intellectual rather than the animal side of human nature is emphasised.

This seems an insuperable objection to the assignment of this work to Scopas by Dr. Waldstein, who is however probably right in supposing that here Hermes is represented as the God of Oratory. Yet though we see him exerting his eloquence rather than his muscles, he is mighty in chest and limbs, as befits one who was also the God of the Palaestra and the messenger of Zeus. He might indeed appear to be the embodiment in bronze of the verse of Horace:—

Mercuri, facunde nepos Atlantis,
Qui feros cultus hominum recentum
Voce formasti catus et decorae
More Palaestrae.

¹ This article reproduces in substance an account of these statues written two years ago, but modified to suit some recent publications. For Plates VIII., IX., see Part I. of this Vol.

So striking is his athletic character that Dr. Waldstein has dwelt on his manly and vigorous nature in contrast to the Hermes of Praxiteles, whom, he taunts with effeminacy, and 'whose beauty,' he says, 'is apt to wane if not to pall.' A comparison between these two works is obviously one of the first steps in any criticism of the Cerigotto statue, although Dr. Waldstein himself no longer assigns the newly discovered work to the Praxitelean school.

The face of the bronze is oval and Praxitelean in outline: the hair is short, curly, and upstanding; the forehead broad, the nose fine but strong, the eyes deep-set. But the analogy to the Praxitelean Hermes is by no means close in all points: the mouth is very short and slightly opened; the lips are fine, but cut so that the red part is broad; the upper lip is very short, and is prettily worked like a Cupid's bow, while the grooves from the nostril are shown. The chin is firm but pointed. It is neither broad and heavy as in the Doryphoros nor so long and deep as that of Apollo Belvedere, nor is it bossy; it is different, too, from that of the Olympian Hermes and is without his dimple. This face is beautiful and the effect is striking, yet when compared with his rival we miss the hand of a master. There is not nearly so much modelling, such care of details, nor such artistic finish: for example the surface about the temples which Praxiteles renders so beautifully is unnoticed in the bronze: but though some details may be omitted, others seem to suffer not so much from want of care as from want of mind to put into the work. The eye-lids, for instance, in the bronze are most carefully treated: the lashes, too, are shown by a row of minute notches, while the lashes on the lower lid are also marked. But if we look at the marble the difference is seen at once: there the lids, and not only the lids but the whole surface round the eye is treated with such skill, and given such a distinctive character, that though the circumlitio would enhance the eye's beauty it would add nothing fresh to its expression; whereas if the bronze were to lose its eyes the glance would lose half its meaning. The same lack of life is shown even more strikingly in the hair. The early masters (e.g. in the Aeginetan bronze head in the National Museum) tried to represent each hair; the sculptor of the Delphian charioteer uses the hair on the forehead and round the ears to form a sort of lace pattern; it is not hair, but it forms good material for drawing and design. In the 5th century they kept it close and short. Praxiteles adopted quite another method; far from being 'sketchy' he represents hair more successfully than any of his predecessors. In the Hermes, the Eubuleus, and the Hygieia, we find the same Praxitelean method used to produce three quite different effects:—a number of locks are shown in masses, which are not grained, while the play of light and shade is skilfully employed to give the general impression. About this time, too, the hair seems to have begun to stand up in shorter or longer locks, as may be seen in the Olympian Hermes and in the bronze Satyr in Munich. (This treatment must be distinguished from the Lysippean hair which stands up to fall down again, as in the Zeus, Poseidon, and Alexander heads.)

In our bronze the hair is short and stands up abruptly: no triangular scheme is formed, though over the middle of the forehead it is higher than

at the sides, but a pattern over each side of the brow is formed of as it were Gothic arches of short upstanding locks, while just in the middle the hair is very short and stands up straight: the rest of the head is covered with short curly locks. The effect however is not good: there is no life in the design: this is partly because the pattern is too mechanical, partly because the locks are grained.

It seems as if the artist had the Praxitelean idea in his mind without understanding that to adapt it to the requirements of bronze in this modified form was to spoil it. The influence of the athletic schools on the figure is striking: the shoulders are broad, and the chest deep and massive: the arms are very powerful. All this upper part of the body is more fully grown and highly developed than the face would have led us to expect. Yet the arms are not very happy in design or execution: the raised right forearm when seen from above is ungraceful, while the wrists are rather coarse. The first and middle fingers of the right hand show curious marks, but it is difficult to make out what object it held. The hips are strongly marked, the legs are graceful and well-shaped, but hardly perhaps as powerful in proportion as the arms. The heavy abdominal muscles are due chiefly to modern restoration.

The type of build of the Hermes of Cerigotto is more obviously athletic than the Hermes of Praxiteles. Neither is in hard training nor for the moment exerting physical force, but each shows the result of careful training of mind and body, and sets before us the Greek ideal of what a man should be. Above all things the Greek demanded that an ideal man should be what we term 'all-round,' that all his faculties should be symmetrically developed.

How then is this ideal realised in the two works? If we can answer this we shall catch a glimpse of that which lies at the back of all points of technical likeness or contrast, the ideal in the artist's mind.

Perhaps the most striking quality of the Hermes of Praxiteles is his harmony, his complete harmony with his surroundings and in himself. Of his beauty there can be no doubt: yet it has often been asserted that his face is too sentimental and that the whole composition is listless and dreamy.

Many, too, maintain that his body, though well proportioned, is heavy and lacks character. It is necessary to consider these charges for a moment and the grounds on which they are based. The whole composition shows a mood, and the expression and pose suggest a reverie: but there is much in the face and form to show that this is but one aspect of the God: it is not that the artist shows one mood only, he has emphasised one and suggested the others. There is strength as well as charm in the whole personality: the interest of the work lies not in the motive of the group but in the type represented. In that type we see the triumphant culmination of *μουσική* and *γυμναστική*: in the whole composition, style, and subject we can trace the mind of the artist and the tastes of his public: it is the embodiment of Greek ideals: Greek art stands or falls with the Hermes.

In rendering the forms of the body the archaic masters tried to produce the appearance of great strength by unduly contracting muscles in repose. Praxiteles knew far better, and also realised that hard ridges suitable for a

Zeus or Heracles would be inappropriate for his subject: the stronger, too, a man is, the greater is the contrast between action and repose. It is true that it is the duty of an artist to open the eyes of those who cannot see, and that if he does not find his ideal in nature he must put it into his work: but Praxiteles has put into his Hermes all the indications of power and agility consistent with the harmony of his picture, and should sudden stress arise the dreamer would change in a flash to the God of the Palaestra and the swift-footed slayer of Argus.

In the bronze we find a different type and a different nature. The artist instead of showing the perfect blending of the highest gifts of mind and body in pensive but momentary rest, seems rather to have expressed his meaning by emphasising different qualities in different parts. Thus he gives his statue a face which shows the refined and intellectual side of his character: the mighty chest indicates physical strength, but scarcely seems to belong to the same being. The statue has neither the harmony nor the charm of the Praxitelean Hermes.

Thus the statue cannot possibly have been the work of Praxiteles. Besides, the well-known passage in Lucian *Εἰκόνες* 6 runs:—‘The hair and the forehead and the finely-pencilled eyebrows he will allow her to keep as Praxiteles made them, and in the melting gaze of the eyes with their bright and joyous expression he will also preserve the spirit of Praxiteles.’ In each one of these particulars the bronze stands in the sharpest contrast to the Hermes of Olympia. Not only that, but the very qualities which Lucian selects as those in which the master excelled are among those in which the sculptor of the Hermes from Cerigotto is least happy. The hair we have already noticed as being artificially and not very successfully treated. The forehead is not so carefully modelled, and also is almost without the swelling over the eyes which forms so noticeable a feature in the Olympian Hermes. There is a slight indication of the trait in the bronze, but in quite another manner.

The eyebrows are differently treated from any that we possess of the best period. In the 5th century they are marked by a distinct ridge, and this was continued more or less in the 4th. The eyebrows of the Praxitelean heads that we have are sharply defined. In the bronze, on the other hand, it is difficult to say where the forehead ends and the cavity of the eye begins. This is not due to corrosion, for the eyebrows are still shown, not by a ridge but by the hairs drawn separately on the bronze. The eyes, which are brown and intent, have nothing in common with the description given by Lucian, nor are they what we should expect from one who ‘*tantum circumlitioni tribuebat*.’

Finally, the pose is not characteristic of Praxiteles. The earlier statues stood firmly upon both feet, the 5th century saw the variations of *Stand-* und *Spielbein*. Praxiteles introduced what was in effect a third leg; this gave a fine opportunity for introducing the lines he loved. This pose is much varied. The *Sauktonos* though alert and in action leans on a tree. In the *Satyr* the position is more complicated, for he first rests on a tree and

then leans away from it. In the Hermes from Cerigotto there is no extraneous support. To sum up:—The statue has not the finish of a masterpiece, nor did the limbs when separate look so well as they do together. The faults are those of a kind which no great artist would commit, while such characteristics as the treatment of the hair and the rounding and softening of all ridges are not those of the 4th century, but later.

It is not then to Praxiteles or the Praxitelean circle that we must look for parallels to our statue; much less to the Scopaic. Dr. Waldstein in an article in the 'Illustrated London News,' (June 1903) assigns the Hermes of Cerigotto to the school of Scopas, if not to the master himself. He adduces a number of works that have been held to reflect the Scopaic style to a greater or less extent, apparently ignoring the inconvenient fact that the discovery of the Agias has caused these heads, except those from Tegea, to be reconsidered. At present our best evidence of the style of Scopas is that of the Tegean heads, as Dr. Waldstein himself acknowledges; but the most characteristic features of these heads are their extreme squareness, depth of skull, bony framework, massive jaw, and the great roll of flesh over the eyes that sweeps down covering the outer corners of the lids and imparting a wonderful sense of intensity and passion. With every one of these features the head of the Hermes from Cerigotto is in direct contrast, as even a photograph, if it be large enough, will show. It is not then to either Praxiteles or Scopas that the statue should be assigned.

It is not only that the Praxitelean type is inadequately rendered: as regards date that might not be conclusive; but it is the distinct trace of later motives and mannerisms, which shows that we must look to a later time when other traditions and other tastes influenced the artist's hand. And here we shall not seek in vain. The Hellenistic head placed on the statue of Aristogeiton in the Naples museum affords a strong likeness. If we allow that the one head belongs to a warrior in fierce and passionate action, and the other to the God of graceful oratory, so that in the one the animal nature is emphasised, while in the other it is fined away, then we can see that they both belong to the same period and the same type.

In both the hair is shown by short, grained, upstanding locks (as is to be seen in many works reproducing 4th century originals, *e.g.*, the Meleager type, and a Heracles published in Brit. Mus. Marbles III., Pl. 12); the treatment of the upper lip and mouth generally is the same, there is the same type of chin, and in both the top of the head is flattened, as opposed to the dome-shaped cranium of the Hermes at Olympia. The Aristogeiton is, however, nearer to the Apoxyomenos type than is the Cerigotto statue, which seems to have drawn its inspiration from the Praxitelean school. The face of the tyrannicide is less oval than that of the bronze, though more so than that of the Apoxyomenos. This difference might be expected from the nature of the subject.

It is, then, to the Hellenistic period that I would assign the Hermes; a time suited to the dramatic nature of the statue and its need of an imaginary audience; a time when men had already begun to look back and adapt the

old ideas to form a fresh design; an age of many types and many traditions, but one in which artists could still be found who could produce work beautiful as this Hermes unquestionably is, while looking to the earlier masters for their inspiration.

II. Although the Hermes has naturally claimed by far the largest share of popular and artistic attention, yet other works of great interest come from the same find, foremost among which are some bronze statuettes belonging apparently to widely different dates and styles. Of these the largest and



FIG. 1.—POLYCLEITAN STATUETTE.

most imposing is the nude athletic victor reproduced on *πίναξ* 14 in the *Ἐφημερίς* of 1902. The eyes, lips, and nipples were inserted in some other materials and are now missing; the fingers of the right hand have been much damaged; any attributes that may have been held have also disappeared, and the patina has been destroyed by the action of the sea; otherwise the statuette is intact. (Fig. 1.)

When first discovered and before it had been thoroughly cleaned this figure was regarded as a work of the 5th century B.C. The simple pose, the close-lying curly hair, the broad, rather square forms of the torso, the well-defined muscles over the hips, the muscular thick-set limbs, the shape of the head, and the proportion of the legs to the body all suggest the influence of Polycleitus. This supposition is further strengthened by the fact that we see in this work the favourite subject of the Argive school, the youthful nude athletic victor with fillet and attribute.

The main weight of the body rests upon the left leg, throwing the left hip into prominence, and causing the line of the body to bend first to the right and then to curve back to the left to keep the shoulders even. The groove from navel to throat, which is clearly shown, is another well-known mannerism of the Peloponnesian sculptors. This curve, however, is by no means strongly emphasised, for the right foot is firmly on the ground, and the right leg is no *Spielbein*, though the knee is slightly bent. The lines, moreover, produced by this posture are unpleasing, while the arms are distinctly stiff; the left hand evidently held some attribute, perhaps a wreath; the right is open and extended and may have held some light object, but no trace of it remains. Both arms are partly bent at the elbow. When first published the pose was compared with that of the *Idolino*, but the comparison only serves to emphasise the lack of grace in the statuette.

However, this inferiority in design may be accounted for by the fact that our bronze is a minor work: the questions to be decided are, first, whether it belongs to the Argive school, and secondly, whether it is a work of the 5th century.

The figure reproduces as we have noticed most of the main external characteristics of the Polycleitan victors; it also reminds us both in pose and subject of the earlier victor from *Ligurio*. Yet although the *Ligurio* figure is obviously earlier, as is shown by the treatment of the hair, the sketchy archaic features, and the clumsiness of its limbs, yet its pose is more natural and pleasing, and the modelling is more carefully executed. Why are we confronted with greater knowledge but less care? Should we expect such a tendency in the development of the Argive school? Prof. Furtwängler has shown (*Winckelmannsprogramm IV. Fest. 1890*) how the way was paved for the 'canon' of Polycleitus, nay, how the whole school seemed to be tending inevitably towards a canon: the continuity of the traditions of the Argive school both before and after Polycleitus is one of its most striking characteristics. What was it, then, which raised that master to his pre-eminent position? His mastery of bronze technique and his infusion of style into the slowly but surely developing type.

The *Diadumenos* from Delos with all his strength and weight is full of grace and latent agility: a combination of qualities which marks the difference between good Argive work and later, especially Graeco-Roman, adaptations: it is by this standard that our bronze must be judged if it is to be assigned to the 5th century. The Argive sculptors could show great muscular development without hardness or dryness in modelling, weight without

clumsiness, grace and charm without undue softening: this is because each line is clear and definite, nothing is ever slurred over: Polycleitus is never unfeeling or careless. Let us look, for example, at the setting of the arms into the body of the *Diadumenos* from Delos, a work which preserves some of the merit of the original and seems to be more of an artist's sketch than a copy hewn out point by point. Contrast this with a good specimen of Hellenistic work, the *Poseidon* from Melos, also in the National Museum at Athens. In the latter the arm joins the body and there are muscles on the chest, but the effect produced is quite different from the vigour and decision of the *Diadumenos*, where the lines are sharp, clear, and definite over the whole frame. Polycleitus knows each muscle, where it begins and where it ends, and shows it clearly to those who would otherwise overlook it. Yet there is no anatomical display; the spectator is hardly conscious of how the effect is produced till he analyses the work more closely. Even then he finds no optical delusion, but nature in her best mood with a something running through it all which is neither the model, nor the tradition of a school, but the artist. So is it always with good work, but especially with good 5th century Argive work; for it was on this finish and accuracy in simple self-centred, nude, athletic victors, that Polycleitus and his school based their claim to greatness. He relied for his effect neither on technical triumph over mechanical difficulties, richness of material, the romantic side of physical beauty, nor the expression of the soul. All these elements must have been present in his works to a greater or less degree; but his fame was founded on his being able to mould a simple torso better, probably, than anyone who has ever lived. He had a narrow gamut perfectly thought out.

A statuette does not necessarily reproduce the characteristics of a single great master: but in this case we should expect the artistic aims to coincide to an unusual degree, for Polycleitus was only the greatest and most typical exponent of the Argive art, whose very essence was care and finesse combined with breadth of treatment, absence of exaggeration, and simple grace.

In the statuette before us we search in vain for these characteristics. There is none of the Polycleitan pose, there is neither life in the figure, design in the composition, nor skill; or even care, in the modelling. The superficial likenesses to good 5th century work are clear, but the archaic simplicity is aimed at and overdone, while all that is good in the artist or his school is omitted. The maker of this bronze did not understand the traditions of the Argive school, nor did he realise that the old masters had chosen simplicity so that their work might rely on excellence alone. Everywhere we find this contrast between the subject and the artist, a facility in rendering a type, combined with carelessness of execution. So severe a condemnation demands more detailed proof. The head conforms in outline to the general Polycleitan type as observed in the *Doryphoros*, *Diadumenos*, *Amazon*, and kindred works. That is to say it is remarkably square in form, the hair is curly and close-lying, the forehead is rather low

but broad, while the chin is rounded and heavy. But as soon as we look into details we find the most characteristic features in no way recalling Polycleitus but treated in a mechanical and perfunctory manner impossible in the 5th century, while the hair forms a dead pattern. The neck is the worst part of all, it is simply a round pillar to support the head, and is wholly without character: neither the trapezius nor sterno-mastoid muscles are even indicated. Compare this neck with that of the Delian Diadumenos, the Sabouroff bronze, or the Idolino, and it will seem absurd to place in their company a work containing so careless a rendering of so important a part. The shoulders are broad and square, but the individual muscles are scarcely shown; as to the setting of the arms (the very point in which we noticed the Diadumenos excelled), they are simply stuck on. There is nothing, except the probable outline of the body, to show where they begin or where the trunk ends: nothing is made of the bones or sinews. Yet these same arms are not without a kind of merit. The left arm as it hangs down has quite a Polycleitan appearance: that is to say it is muscular, rather heavy, the biceps are full and long, and the general lines (taken apart from the general pose of the figure) are suggestive of strength and beauty. But again, these arms will not stand inspection; they are too sketchy: the general look is 5th century, but the work shows none of the care and skill we should expect. The wrist, too, is rather clumsy, and although some object is held in the hand, none of the sinews of the forearm is indicated. In the body this lack of thoroughness is even more apparent. The pectoral ridge is heavily emphasised, and the nipples were inserted in some distinctive material. But the termination of the muscles is indicated by a hard, unfeeling groove driven right across the body: while the costal margin, the abdominal muscles, and the ilio-pubic line are barely shown, and what remains of the belly is hard and leathery: the hip muscles on the other hand are strongly marked. All this part of the body is more like the Stephanus athlete than any good Greek work, and forms a strong contrast not only to the greater works of the best period, but also to the unpretentious little victor from Ligurio. Exactly this skill in modelling the torso, which is so conspicuously absent in our bronze, is the very point in which the Argive school excelled.

The back is even worse. Good modelling is not attempted, nor is the design at all pleasing. A glance at the beautiful bronze Pan in Paris (published by Prof. Furtwängler in *Röm. Mittheilungen*, III. p. 287) will show how impossible it is to assign the two works to the same school and time. With the legs we find just the same merits and defects that we find in the work as a whole: their main lines are good, or rather suggest good work: they are muscular and belong to the sturdy 5th century Argive, and not to the later Lysippean standard: the back of the knee is good in outline. But they lack character. Here, as elsewhere in the figure, there is no style, no design. Nowhere can one lay a finger on the work and say, 'this shows the artist.' The limbs are round and soft, the tendons, bones, and muscles are not shown: the effect of the whole is good from in front at a distance,

but that is all. The general result, then, of our investigation is that when new and adorned with a gilded circlet, bright eyes, red lips, and a shining patina our little athlete would have been a pleasing ornament for the drawing-room of a rich but uncritical owner: that it reproduces the type, in outline, of the 5th century Argive athletic statues well enough, but that when we look into the technique we find both in form and features (especially chin, neck, and thighs) that the work is more of the type of the Apollino



FIG. 2.—STATUETTE OF HERMES.

than the *Idolino*; that the structure is hidden or not understood; and that it was not the maker's intention to give the idea of rounded softness, which he does, but to give the appearance of youthful but muscular power, which he does not.

This attempt to render a well-known and popular type, combined with a lack of understanding and a carelessness in detail, stamps the work not as a 5th century original, but as an object intended for the Roman market.

III. The rather smaller statuette of *πῆλαξ* 15 contrasts favourably with his companion on the preceding plate. He has neither the stiffness nor the archaistic appearance of the other, while in some respects the work shows considerable merit (Fig. 2). The preservation is remarkably good; with the exception of some corrosion of the surface, the loss of the attributes, and the greater part of all the fingers of each hand, the figure is practically intact: even the eyes are fairly well preserved; the pupils it is true have disappeared, but the white is still in its place.

The form is that of an athletic young man, nude except for some drapery thrown over his left shoulder and covering the arm. The weight is resting on the right

leg, while the left reminds us of the scheme of *Polycleitus*. The head is small, being no more than an eighth of the total height. It is half turned towards the left. Both the directness of the gaze and the general bearing suggest a certain boldness and independence, which, combined with the powerful frame and the grace of the design, gives a frank and pleasing effect. The middle point of the whole length instead of being at the extreme end of the trunk, as in the *Doryphoros*, is considerably

lower. This smallness of head and length of limb point to a date after the period of Lysippus. It has been stated that the work shows traces of the influence of Polycleitus. But this phrase is rather misleading: neither the build nor the proportions are those of the Polycleitan school: the broad treatment of the body, the strong hips, and the muscular limbs do not prove anything to the contrary. This figure has acquired nothing from Polycleitus that was not the common heritage of all his successors, and what traces of his influence survive would have been taken not from him but from the well-formed types of the 4th century. Nor should much stress be laid on the scheme of *Spiel- und Standbein*; both the *Hermes* from Andros and the *Apollo Belvedere* present different adaptations of the same idea, though neither has any direct relation to the school of Argos. By the time of Lysippus there were a number of well defined types already existing: Greek art had been built up by different sculptors at different epochs, each of whom contributed something towards the general store of artistic motives and technical triumphs. The one thing which cannot be inherited is style: that the artist must form for himself, however much he may use the labours of his predecessors.

That Polycleitus influenced all athletic art in the fourth century, especially in the treatment of the torso, seems highly probable; but this torso does not bear evidence of being distinctly Polycleitan, while the face shows an entirely different treatment. In reality the whole motive of the statuette is far removed from that of the Polycleitan works. The mouth is firmly closed, the look is direct, and the pose self-reliant: there is none of the modesty almost amounting to shyness that is seen in so many of the Argive youths; nor is the chin of that full, heavy kind so noticeable in the *Diadumenos*: moreover the drapery on the left arm is foreign to that type.

If we can trace Polycleitan influence at all we can certainly see other and more powerful influences as well.

The hair is quite sketchy and does not prove anything (except that it is of the best period). In the forehead, however, with its pronounced bar, in the short, wide-open eye with its keen glance, in the short mouth, in the depth of the head, and in the strongly pronounced bonework of the jaw and chin (which is bossy rather than round), the traditions of Lysippus seem to be felt. This idea is borne out by the powerful frame and muscular limbs. The type of man represented is more that of the *Agias*, though the proportions are longer, than that of the *Doryphoros* or our copy of the *Apoxyomenos*.

The artist was not without some skill and pride in his work: the mouth is not an unfeeling slit as is so often the case in late bronzes; it has some design. The neck, too, possesses some character, and is very different from the meaningless drum on which the head of the companion figure is stuck. The shoulders are broad with an upright and easy bearing; the chest is deep, the waist and hips seem strong and supple, the back also is treated with some care; but on the whole the modelling of the body is not first-rate. We must make allowance for the condition of the surface, but the corrosion has not gone very deep, except in one or two places. Quite enough is left to show

that in comparison with any really good piece of work the modelling was superficial and sketchy, though pleasing in its main lines. The principal muscles of the back are indicated, but nothing is made out of them to increase the beauty of the statue; the chest muscles and costal margin are shown, so doubtless were the abdominal muscles, but not with any assurance or decision; the lines are there, more or less, but they do not mean much; the anatomy contributes little to the general design. The muscles over the hips are strongly marked, but the pubic line is not decided, in fact it leaves the abdomen rather triangular in shape, which was not the custom with 4th century bronzes. This is the more striking as we are here dealing with a full-grown and powerful man, whereas after Polycleitus that feature is given to boys in Greek art, perhaps a little prematurely, as, for example, in the Sabouroff bronze. However, the artist has avoided the worse evil of driving an exaggerated, unfeeling groove in a sort of semi-circle from one iliac crest to the other, as is so often done in Roman reproductions. A good specimen of this latter treatment, among many others, may be found in a little marble Dionysus torso belonging to the Finlay collection, and of evident Graeco-Roman work. In that case the surface is polished like ivory, the modelling is hard and mannered, and, although the torso obviously belongs to quite a boy, the short broad lower belly is bounded by this groove, which makes no distinction between the surface over the iliac crest and that of the softer tissues and ligaments of the body. Yet when intact the Dionysus might have looked pretty enough to a casual observer in a garden.

Our bronze, then, has avoided much of the hardness of later times, but falls far short of the care and precision of good Greek work even in minor objects.

This can be seen at once if we glance again at the victor from Ligurio. He still shows much of the clumsiness of archaism, and is the work neither of a genius nor of a great master; also he is smaller in actual size than the figure now before us; but the torso is moulded with the greatest truth and care, though the limbs are somewhat dull. The line of the belly is not emphasised, it is true, but then he was before Polycleitus. In our figure the limbs continue the effect of the body:—good in general form and outline, but the execution in detail does not correspond to the skill of the design. The setting, for example, of the knee is good, especially when seen from behind, and some of the main tendons are shown, but the individual muscles round the knee and along the front of the thigh are not: whereas much is made out of them in Greek work. In the Polycleitan statues the muscles above the knee are especially noticeable, while as early as the ‘Apollo’ of Tenea we find them carefully worked. The sculptor of that statue knew more, and omitted more, than any of the earlier artists who fashioned ‘Apollon.’ He uses the muscles and bones of the two legs to form a design, and this sign of the artist stamping his work with his own personality is what marks out this ‘Apollo,’ and gives it its merit. The artist, though archaic, had *style*; he had learnt from Nature, formed his ideal and then gone back to Nature with a preconceived idea which guided his hand and art. Our bronze

is content with a leg intrinsically more life-like, but artistically poorer. The same faults appear in the arms: though they seem so powerful, and though, especially in the right upper arm, they show some care in modelling, they are more rounded than the type of man would lead us to expect. The effect of the whole suggests that we have an artist of skill and experience, but that he had not attained this type by careful study of details, by thinking the thing out, but rather that he is reproducing, or at least adapting, well-known types that lay ready to his hand. This becomes clearer when we reflect that the pose of the figure is by no means unique: in the same museum, quite close to the statue, are works which afford a close parallel: in fact, our bronze belongs to a well-defined series, examples of which abound both in marble and bronze, through whose help we can reach a safe interpretation.

We find a great number of somewhat similar figures resting the weight mainly on the leg (usually the right), and having some drapery thrown over the left arm.

The earlier of these had been long supposed to point to some type which originated in the 4th century; the discovery of the *Hermes* of Praxiteles confirmed that supposition and showed that it was with the *Hermes* that the type began.

The later examples continue the motive, which seems to have become fixed, but do not reproduce the Praxitelean style. We find Lysippean and Graeco-Roman figures of this type which are in no way connected with Praxiteles in point of style. Now, our bronze clearly held something in his right hand, and even more clearly carried in his left a staff of some kind which lay back and rested partly on his elbow. Not only is his left hand hollowed to receive it, but there is a deep groove in a fold of the drapery to support such an attribute, which can hardly be other than the *κηρύκειον*. The fact that he holds it not in his right (as on the sculptured pillar-drum from Ephesus) but in his left, seems to show that he held some other object in his right hand, a conclusion we have already come to from the form and position of the hand itself. This object was in all probability the purse which *Hermes* so often carries in later works of art.

A close parallel is to be found in a bronze in the British Museum (No. 825 in the catalogue) one of the best of Roman bronze works. Here, too, more styles than one are to be seen, so much so that Professor Furtwängler considers the statuette Polycleitan, while the British Museum catalogue calls it Lysippean. Perhaps the simplest explanation is that the Peloponnesian type, of which Polycleitus was the great expounder, left its influence more or less on most subsequent schools when the nude male type in a simple pose was represented, just as it certainly influenced the Athenians of the 4th and 5th centuries.

This bronze in the British Museum is nearer the Polycleitan style than the statuette we are considering, but it does not belong to the Polycleitan school a whit the more.

Another work in the same category is No. 315 in the Bibliothèque at Paris. Here, also, the purse and caduceus were once held but are now lost;

while both in Paris and London are a host of Graeco-Roman bronzes that reproduce the type to a greater or less extent.

It is a Hermes, then, that we have before us, holding the caduceus in his left hand and the purse in his right.

The Greeks, it is true, were familiar with Hermes *ἑρμῆς*, but the purse seems to have been placed in his hands by the Romans after he had been identified with Mercurius the God of Trade. When this first came about is uncertain, but no instance occurs on pure Greek monuments, while in Roman times such a representation was common enough.

The reason, then, for the difference of workmanship between the two statuettes from Cerigotto seems to be due not so much to their date as to the object of their production. In the larger the artist was trying to reproduce a work in a set style which he did not quite understand, and with which he had not much sympathy: in the smaller he was set to make 'a Hermes' as best he could, and he has produced a pleasing work following no one particular style, but with reminiscences of many. After about 300 B.C., unless a work is a copy or is frankly archaistic, it is scarcely fair to say this work is Polycleitan, or that is Scopaeic. There are a number of types, it is true, that are associated chiefly with a few great names, and we try to get at the style of early masters by working back through later echoes; but these had become common stock for sculptors who often reproduced a motive originated by one type in the style of another. Our bronze is one of the most pleasing of recently discovered works; while to the Roman public, even if this were a would-be Greek statue, there would have been no anomaly in a Hermes carrying the purse which they associated with his name. Such an attribute would confirm the effect independently produced by the style of the actual work: namely, that here we have a charming little figure produced to meet the taste of the day by an artist of considerable merit in his line, who knew something of the earlier traditions; but that this Hermes was intended neither for the criticisms of Greek fellow-citizens, nor for a collector of antiques, but to adorn the house of some cultivated Roman.

IV. The only marble figure recovered from Cerigotto in anything approaching a good state of preservation presents some interesting problems, especially as to its interpretation.

The left side of the statue is eaten away by the action of the water and only enough of the arm and leg remains to enable us to judge the general direction of these limbs.

The type of man represented is by no means ideal; it is quite impossible that he is intended for a god, hero, or athletic victor. He might, however, be a hunter or a Lapith, or part of a genre group representing boys wrestling or playing some game. The pose is, as far as I can discover, without parallel in ancient sculpture still preserved. I had wondered whether it could represent Actaeon crouching and peering through the trees at Artemis, removing an intervening bough with his left hand and holding a hunting spear in his right. But apart from other objections, it is not likely that a sculptor of a late period and mediocre rank would treat such a familiar subject in a

strikingly original way. M. Castriotis considers that the figure represents a wrestler, in spite of the inactivity of the right hand and the want of concentration in the face. Dr. Waldstein conjectured that it is a crouching warrior, and compares a Lapith from the Parthenon delivering an upward stab with his sword. The Lapith, however, is only taken from a drawing of Carrey, and is in a wholly different position, while the half-amused, half-ribald expression on this statue is not that of a warrior in deadly conflict.

Besides this I am convinced from several careful examinations of the inside of the hand that it held nothing: the want of any indication of effort



FIG. 3.—MARBLE FIGURE FROM CERIGOTTO.

in the forearm confirms this, so does the marble left to support the fingers and thumb: for if an object were held in the hand it would render such bars superfluous.

M. Kabbadias, while admitting that the statue represents neither wrestler nor combatant, finds a 'satisfactory explanation' in the idea 'that the youth is shading his eyes with his left hand and gazing into the distance.' But the position of the left arm and shoulder make the shading

of the eyes with the hand difficult if not impossible, as a practical experiment will show, while there is no trace on the forehead of the hand having touched the brow as it certainly would have done. The eyes also are not fixed on an object in the distance; they are giving a quick upward glance, as is suggested by the whole position of the head. That view seems much nearer the truth which considers that the statue represents a 'gamin' feeling for a stone to throw at another rascal. The objections, however, to this are that it does not explain the action of the left arm, and that the right hand ought to give a clearer indication of its meaning; while the opponent must either be imagined or, if in a group, be unnaturally close.

To all these theories there are two main objections. First, the statue does not represent motion, but momentarily arrested action. There is not enough play of muscle shown in any part of his body to indicate sudden rising or stooping, while the whole right arm is not doing anything and has no immediate intention of doing anything. Secondly, the head is thrown up suddenly. The curve of the back and the angles both of the neck and head are not those of a man stooping while keeping a watch on his opponent. I believe the true explanation to be that the figure once formed a group of *ἀσπραγαλίζοντες*. The player was in the act of picking up his die, but has stopped suddenly to hurl some gibe accompanied by a gesture of disdain at his opponent, who has probably made a remark. *Ἀσπραγαλίζοντες* formed a well-known subject, and supplied the motive of one of the most famous groups by Polycleitus; they would also be most appropriate for a garden, for which this statue was probably intended. This theory would be consistent with the fellow's age and character, and it would afford a simple explanation of the expression, the suddenly upturned head, the action of both arms, and the general pose. In rendering the body the artist has attained considerable success, chiefly through not being too ambitious. There is no high ideal or treatment, yet the sculptor must have possessed a considerable degree of artistic feeling and sympathy. This is seen best from behind (which fact strengthens the impression that this figure was originally face to face with another) where the treatment of rounded outlines in the back and loins is distinctly pleasing.

As to the period to which the statue must be assigned it is difficult to find definite evidence. The tendency at first was to call it a Rhodian or Asiatic work of the 2nd century B.C. Without actually denying this view I would rather suggest that the work is good Graeco-Roman. The figure, it is true, has merit, but not beyond the powers of a sculptor with good traditions and models, whether he lived in Hellenistic times or later. This view is supported by secondary evidence:—The figure was evidently left partly unfinished to prevent breakage during transport; when shipped it would therefore have been but recently carved: but the ship which carried it carried also some statues, as the replica of the Farnese Heracles, of obviously Graeco-Roman date. So it seems probable that the statue was originally designed for what would in any case have been its final resting-place, a Roman pleasure-ground.

V. Among the large bronze statues which sank in the ship only the *Hermes* has survived: several fragments however of the others have been found, of which the most interesting is the head from a portrait, in good preservation, and now mounted on a pedestal in the National Museum at Athens. The features are strongly marked and forcible, and the portrait possesses a certain individuality which seems to claim our attention.

The head belongs to a man of middle age, bearded, and of a rather unkempt appearance. The face is broad, the eyes are small and placed wide



FIG. 4.—PORTRAIT OF A PHILOSOPHER.

apart, the nose is thick and aquiline, and forms the sharp angle with the brow that is found in some Hellenistic philosophers. The character of this head has undergone a complete transformation since its first discovery, owing to the amount of cleaning which the action of the sea has rendered necessary. The manner in which the metal had oxidised produced the effect of a face rather square in outline with a thick bushy beard; naturally it was regarded as a portrait of a boxer, but the removal of the scoria with which the surface was covered has made it clear that this identification can no longer be main-

tained. The face is by no means that of a pugilist. The rough hair and beard show that the portrait is one of a Greek philosopher and the general type belongs to the 3rd century.

The patina has been destroyed, but in spite of corrosion the treatment of the surface can be clearly seen. The eyes, as usual, were inserted in different materials and are fortunately still preserved with the loss of only the pupils. The face is strikingly realistic, there is no attempt to eliminate the accidental: on the contrary personal traits such as the furrows on the brow, the folds of the skin under the eyes, and the lines and marking of the cheeks are emphasised, while there is little or no attempt to idealise the subject or to form a type. Neither the motive nor the realism makes it impossible that this head is an original work of the late 4th or early 3rd century: the difference of aim between this and the portrait of Pericles, after Cresilas, is obvious, but the type here shown closely resembles the so-called Heracleitus and Democritus, both fine 3rd century bronzes (Plates 157-160 in F. Bruckmann's series of Greek and Roman portraits).¹ But in the head before us the workmanship is not only realistic, it is coarse.

The lines, for example, on the forehead are made quite carelessly, there is no feeling for the texture of the brow, there is nowhere any delicacy in modelling the surface. It is the same with the eyes: they seem to have a certain amount of life, but that is due to the colour of the material rather than to the skill of the sculptor: the lids are mechanical and clumsy, even after making due allowance for the action of the sea. If this head be compared with our copy of the portrait of Sophocles, it lacks the dignity and beauty of the marble, nor does the face possess the force of the portrait of Demosthenes. The bronze head of a Satyr at Munich shows how inferior this work is both in artistic finish and bronze technique. A most instructive comparison is also furnished by a work in the same museum at Athens, the well-known head of a boxer from Olympia. Both are of bronze, both are portraits, and both are bearded: but here the resemblance ends. The beard and moustache of the boxer are most skilfully and carefully worked: the short curls bristle with defiance and the general effect of hair is at the same time well rendered. The hair on the face of this bronze from Cerigotto has no character at all, while it forms no design: it merely hangs down in long thick locks, for the most part roughly divided in the middle by a groove. The hair over the forehead and on the temples is treated in a similar manner. There was a splendid opportunity for effect in this tangled mass which is not inappropriate to the rugged features, but no attempt is made to form a scheme, or to use light and shade after the manner of the Pergamenes.

This lack of imagination in the hair and want of finish in the modelling, which is noticeable more or less in all the statues from Cerigotto, recall some of the later bronzes from Pompeii rather than good Greek work. The portrait

¹ For this comparison I am indebted to Miss McDowall.

of Jucundus of Pompeii, although it represents a very different individual, shares nevertheless many of the characteristics of this head. The small staring eyes, the deep hard lines on the forehead, the rude realism, and the lack of feeling in handling the surface combined with a careless or mechanical reproduction of details are common to both these works, in striking contrast to the above-mentioned heads of the 3rd and 4th centuries. We see, then, in this head from Cerigotto, a work which at first promises to prove an interesting portrait but which, though not without a certain effectiveness, has little artistic merit: it possesses neither majesty nor charm, it represents merely a '*senex promissa barba horrenti capillo*.'

Just as this ship seems to have contained adaptations of 5th century athletes, so I believe this head to be a reproduction of a well known 3rd century philosophic type, and to belong to much the same class as those later portraits which adorned private libraries at Pompeii.

From our examination of these five statues it is evident that the first estimate of the value of the sunken ship must be reconsidered. But besides these the fragments and the corroded marbles raise some important questions.

A careful study of the marbles is not within the scope of this essay, but there is no doubt that they are of Graeco-Roman origin and secondary importance. It is also clear from the extra supports left on the marble that the figures were meant for export. The natural conclusion is that the ship is nothing more nor less than a sunken merchantman. There must have been a great demand among the Romans for such statues; those here recovered are for the most part popular works not meant for the connoisseur, but within the reach of the average Roman. Such a cargo would vary in quality, and it is only natural that the dealer should include in his collection a few works of special value. Such a work is the Hermes. Statues of this kind would have been plentiful enough in Greece, and would have been much prized abroad.

The lead still clinging to the feet is no real argument against this view. The phrase '*wrenched from their pedestals*,' which is usually employed, does not represent the fact. The bases themselves were probably broken, and the operation must have been conducted with some care or the ankles would have been injured, which is not the case.

Had they been figures carried off from a sack as trophies their condition would have been very different; while the useless encumbrance of pedestals would have been as unwelcome to the merchant as to a conqueror. Furthermore, besides the adaptations we have noticed, there is at least one acknowledged copy: the Heracles. But, without considering the great masterpieces, there was a wealth of good Greek originals left in Greece till at least the time of Pausanias, which would have been at the mercy of a victorious general. Why should he take copies? Such scruples were rarely shown even by provincial governors, while Sulla, of all men, would have done the exact opposite.

I cannot help concluding that this is precisely the cargo for a merchant, while it is precisely the collection that no conqueror would be so foolish as to make. This conclusion, if correct, far from lessening our interest in the statues, should tend to raise our opinion of that long period from 200 B.C. to 300 A.D., which is too often treated with contempt, and should help us to remember that it, too, has some claim on our admiration.

K. T. FROST.

ALEXANDRIAN HEXAMETER FRAGMENTS.

[PLATE X.]

IN the winter of 1900 a number of Greek papyrus fragments came into my hands in Cairo, through one of the most trustworthy of the local dealers. They had to be sorted out from a mass of miscellaneous fragments, with which they had probably been found. The shop was rather dark, and the pieces had not been cleaned; but the hand was clearly literary, and the few words I made out in sorting them over, led me to think that they were, like most literary papyri, Homeric. It was not until some months later, in Oxford, that a more leisurely inspection of them revealed their unusual character, and convinced me of their true importance, as the fragments, unfortunately meagre, of some Alexandrian hexameter poem, no longer extant. A further examination disclosed some curious features, chief among them a system of spelling that seems to mark these pieces as unique among published Greek papyri.

The recto of the papyrus is covered with a series of late second century accounts in two, or possibly three, rapid cursive hands. The verso of this old account roll,—which seems to consist of little more than lists of names followed by amounts in *arourae* and *artabae*, and was perhaps a register of land, with the amounts of produce chargeable upon it for rent or taxes,—was afterwards used for a hexameter poem. The question arises whether the papyrus of hexameters was not a copy made by someone for his own use, rather than a copy made for sale. Mr. Kenyon has been disposed to maintain that works written on the versos of old accounts were always personal copies, not copies for sale. But Messrs. Grenfell and Hunt have pointed out that their fine copy of thirty columns of *Iliad E*, a manuscript very well written and apparently designed for sale, occupies the verso of the ‘Petition of Dionysia to the Praefect’ (*Oxyrhynchus Papyri*, II, p. 96). The hexameters before us, however, have no such claims to calligraphic excellence, and the space-saving devices occasionally resorted to, together with the extremely peculiar hand in which the whole is written, invite the suggestion that the copy was made by the person who proposed to possess it.

Of the eleven fragments,¹ the largest are B (45·5 × 16·2 cm.) containing Columns II.–V.; C (14·7 × 21·7 cm.) containing Columns VI.–VII. (of which a facsimile is given in Pl. X); and A (10·3 × 21·5 cm.) containing

¹ The fragments measure *A* 10·3 × 21·5 cm., *B* 45·5 × 16·2 cm., *C* 14·7 × 21·7 cm., *D* 3·6 × 14·5 cm., *E* 9 × 16 cm., *F* 5·5 × 11·2 cm., *G* 6·7 × 18·5 cm. The papyrus is No. 101 in the writer's collection. The fragments were said to have come from Ashmûn.

Column I. The order of cursive hands on the recto suggests this placing of Column I., although other columns may have intervened between it and Column II. and between Columns II.-V. and Column VI. The fragments designated IX., X., XI. seem certainly to belong after Column VIII., but in what order cannot be determined, and the little fragments XII. and XIII., which I have been unable to fit in anywhere, are added by themselves, for the sake of completeness.

The hand is a peculiar one. It is uncial, careful, and square, but inelegant. Δ is in the late, almost cursive, form. Χ is hardly larger than other letters. Ρ is short, not going below the line, while Φ has a long vertical. But Ε is the distinctive letter of the hand, having the form Ε̇. The writing is in columns of twenty-six or twenty-seven lines. There are no accents, unless a possible acute on . . . ἐρωτάτα, VI. 13, be admitted. Breathings, marks of quantity, scholia, and critical marks are lacking. The dative ι adscript is not written. There are a few instances of punctuation, some lines being followed by a high, middle, or low point. Several short lines are followed by a crooked dash, to fill up the space and relieve the inequality at the right margin of the column. This recalls the curious dash used to fill out the lines in the Oxyrhynchus Λόγια, a papyrus belonging, like these hexameters, to the second or third century.

The orthography of the fragments constitutes their most interesting feature. ἀνγελον for ἄγγελον, IX. 8, χαρίζι for χαρίζει, III. 13, τουτον for τούτων, φοιλα for φυλα, VI. 13, of course hardly require mention. A more striking feature is the doubling of ι in such words as ἀρήμιος, III. 6, and ἱερός, IV. 1, VI. 10. This doubling occurs, Prof. Blass kindly informs me, in Cyprian, Attic (ΤΗΗΟΙ), and Pamphylian (ΑΔΡΗΩΝΑ) inscriptions, but I am not aware of any other instances of such spellings in papyri. φιλοκξε, IV. 4, is paralleled in ἐκξουσίαν, *Oxyrhynchus Papyri*, II. p. 228, l. 18, in a papyrus dated A.D. 23, and is moreover corrected from κξ to κσ. The alternative semi-resolution of ξ to ξσ appears in ὑπερεξσοχ[.]ν, I. 25.

In orthography the papyrus presents a further point of resemblance to the inscriptions. Before σθ, σμ, σπ, στ, an additional σ is inserted. Meisterhans in his *Grammatik der attischen Inschriften* has collected instances of σ doubled before κ from Attic inscriptions of the classical and Macedonian periods, of the second century B.C., and of imperial times: Ἀσσκληπιός, Διοσσκουρίδης, Φρυνίσσκος. Again, σ is doubled before χ in an inscription of the fifth century B.C.: Αἰσσχύλος; and very often before τ in inscriptions of the old Attic time, of the fifth, fourth, and third centuries, and of imperial times: ἐσστίν, χρηστή, Ἀρίστων, Κάστωρ, Νέστωρ, εἰς Τένεδον, εἰς τήν, εἰς τό (Meisterhans, *op. cit.*, p. 69). Similar instances occur in inscriptions from Ozolian Locris of the fifth century B.C. (Roberts, *Introduction to Greek Epigraphy*, Nos. 231, 232), and in Macedonian inscriptions from Pella, dated A.D. 46, cf. Burton, *The Politarchs* (*Am. Jour. Theology*, II. p. 611). Of instances of σστ, the papyrus gives the following: περισστη[I. 21, ασστ[εροντι] I. 23,]ισστοις II. 4, ασστραππουσα III. 1, γαμοσστολε III. 5, μυροβοσστρ . . εντος III. 9, ἀρισστεας VI. 12, πολυσσταφυλ[VI. 25,

αγνωσστο[VI. 26. Of instances of σσθ, we find πολυσσθενεωπα II. 11; of σσπ, συσσπορα VI. 2; of σσμ, κοσσμον IV. 9; of κκτ, νυκκτ[VII. 4; of ππτ, ιππταται III. 10. Μοκχθοις IV. 11, επι κχθονι VI. 16, μοκχθουσα XI. 7, and οπφθαλμοις[ι IX. 3, and οπφθαλμοισιν X. 5, are analogous spellings. Mid-way between this insertion of the smooth mute before the smooth, and the smooth mute before the rough, falls τετακγμένοι X. 6, in which the smooth is inserted before the middle palatal. As a whole, this series of spellings has, to my knowledge, no parallel among papyri, or other Greek manuscripts, and constitutes the distinctive feature of these fragments. Prof. Blass has suggested that this system of spelling may have been the work of a grammarian of the Alexandrian period or later.

Of the poem to which these hexameters belong, the fragments unfortunately preserve few complete lines and no complete sentence. The halting metre of some verses suggests a late date for the work, and the vocabulary occasionally recalls expressions in Theocritus and the anthologies. The poem was doubtless a work of the Alexandrian school, perhaps of the second century B.C., the reference to the Ptolemaean Arsinoë, I. 5, suggesting the *terminus a quo*. Professor Blass, who has kindly looked over a copy of the fragments, has pointed out to me that the laws of versification introduced by Nonnus are not reflected in it, and it is thus earlier than that poet, at any rate. Nonnus did not permit a hexameter to end in a proparoxytone, while our poet does not scruple to end his verses with ὄλυμπον and ἄνακτος. But the palaeography of the fragments will of itself carry the work back to a time some two centuries before Nonnus. Of the nature of the poem it is more difficult to judge. Several expressions, *e.g.*, the 'winged loves,' and the address to Aphrodite as γαμοστόλος, suggest an Epithalamium. Professor G. J. Laing, of the University of Chicago, has proposed the view that it is an Epyllion or development of a single heroic episode, without action,—a favourite form of composition among the Alexandrians. Again, the fragments may belong to a proper Epic poem of the Alexandrian time; but until some further fragments are recovered, it seems impossible to decide between these views.

COLUMN I. (*Fragment A.*)

συνδαμ[.] . ς σεμνα . [.] . λαις καπα[
 . . . μοις μεταλο[.] . . χησομ . .[
 χαιρετ τιωτ . . ταμακ[
 συνχθ . ωκ . . . μεροπεσσι και αθα[νατοισι θεοισι
 5 αρσινωα πτολεμαιου γυναι αιγενες[
 ημμαναρεσπ . οβ . . . [.] . . πανδ[
 σο . . . οπ . ν . . . γει . . . λαωστε . [
 ζ ασ ατ . . ν μαλα δα . [
 τ . ο . . . α . . αν ο . . . α πασι βροτ[οισι?

- 10 πρωτον μεν γαρ εχον προς σε[
 μ . . . σ . ενας νηων το π[
 α ρι [.] λλι . κη[
 ου [.]υ προ . ο . χ . ο . σ . [
 φω [.] . . .] . προπασαι κρατουσας[
 15 . [.] . . . [.] περι νωτα καλοις τε[
 [.] α]μφιπολων συν κλε[
 . . .]δε . . [.] α]θανατων προκαθηγητηρ
 α]μ<α>φιπο[λο]ις σκοπελοισιν ομου τ[
 οι] αναφ[υλ]ασσουσιν πτολιν η . . . ε[
 20) . .]ρμαχ[.] .]εν πρωτα πατηρ ανδ[ρων τε θεων τε
 .]πειχ[.] .] . φαες να περισστη . [.] . [.]θ[
 .]κειθ[.] .]ιο . [.]γ . . .ς [.]υν καλλ[.]πυρο[
] . . ουρανω ασστε[ροεντι
] κρονειονος πα . τ . . ο . [.
 25]μ υπερεξσοχ[.]ν ατε . [.
]ν κολπω αμα καλω . [.
 (End of column.)

5 'Αρσινόα; cf. Theocritus 15: 111. The daughter of Ptolemy I. and sister and wife of Philadelphus is probably meant.

(Fragment J.)

The following fragment shews the same hand on the *recto* as that of the *recto* of Column I., and may possibly belong to it; but I have been unable to fit them together.

- 5
]λων υμεναιων
]θιασειαις
 α]νδρασι τερπνοις
]αιοιδη
]αρισστοις
] . και καλ . . . η
]νθασιληα[
] . πελοιο μεγ[
]σι πλευροι[ς
 10
]ος ημετερη[
]μηλοις[
]μοιο—
] . [

COLUMN II. (*Fragment B.*)

-]βους
]νη
] . ννη
]ισστοις
 5]ον
]ον[]
]ς
]ς[
] . φ[.]
 10]ηποντ[.]στου
 π]ολυσσθενεωπα .
]ς τυπον η γεγασα
]υς χθονος ηδε πολλων
]ς ποντον οπαζεις
 15] . [. ο]πλιζη
] . εσω[
]σ[

(Probably nine lines missing.)

COLUMN III.

- λ[.] ασστ[ρ]αππουσα γελα τ[ε]ρπνοισι προσωποις
 κ[.] θαλασσοπορον χαροπε δ απ[ο] ποντου
 ε[.]α . απο . [. . . .] . [. .] . [.] . αθανατων τε
 α[.] . ει . μ . [.] . . . αναφρον .—
 5 ω [καλη αφρ]ογενεια γαμο[σ]στολε και χαρι τερπνη
 χ[.]α τυπον γλυκεραις τε αρηια δ εστιν
 τω[.] εфар . ν θαλεροι πηδωσι ερωτες
 εκγδ[ο]νεων μαζων δροσεραι θ αμα δυαι
 και εκ[.]ων ξανθοιο κομη[ν] μυροβοστρ . . εντος
 10 ηδυτατ . [. . .] . . ωρσιδαω χροα ιππταται ανθη—
 η [κ]αι προς θαλα[μ]οις μειξασα καλων υμεναιων—
 . .] . νωσμεν νυνφην παπα πασοασιν ανδρι ποθητην
 ενθ]αδε τη νυμφη προς ασ λον συ χαριζι

COLUMN V.

Initial letters of seven lines α[τ[ο[ω[α[δ[α[
 Lines 8-12 σεμ[νωσ? π[τ . [καρμη . [τον τρισ . . [
 κα[. . . .]ω . [
 τοις νε[
 15 ων κα[
 σου γαρ[
 πρωτα[
 ξεν [
 κ[

(Probably seven lines wanting.)

COLUMN VI. (*Fragment C.*)

.] πολυν ηερα και χθονα δειαν—
] και συσσπορα τερπνα τα γαιης
]αρ ομου χλοεροις σπορι . σσιν
] δροσερων ανεμοιο λαβοιντα
 5 ]ι καιροισι διοισι δοθειτων
 ] μεγαν ουρανον ολβιοτα ξεν
 ]ο κρονειονος ανκυλομητον
 ] . . εοι δε τ εχοι προς ολυμπον
 ] . α κερανοβιην γονον ωκυν
 10 ]ραν ιερας χθονος ημετερησιν
 ] δ ετερον ηγεμονηα
 ] και αρισστεας ης παλαμησιν
 ] . . ερωτατα φοιλα γιγαντ[ω]ν
 ] . ν γενος αγριον ανδρων—
 15 ] . . [.] και αλων κατα κυμα θαλαττης
 ] [. . .]τον επι κχθονι κατα ποντον
 ]ασει[.] . . . [. . .] τον εκγαιων βρια[ρ]εφοντης
 ]υσ[. ε]κατηβελεταο ανακτος
 ] . ηυκομος τεκε λητω—
 20 ] κορυφαις λασιωτιδος υλης
 ] αμβροτοις και σε υωγοι
 ] . [.] ν[.]μοι . προ πων
 ]ν[.]ρκον[.]δε[.] . [.] μων
 ]το ακμαθ . α . αν

25]ωντο πολυσσταφυλ[.] . ων . .
] . επ αγνωσστο[.] επιλοιβαι
]μαλετικον οι δ εκαλουν τε

(End of column.)

6 ὀλβιστε has been suggested, but the papyrus seems to read ολβιοτα, apparently a vocative like μητίετα.

10 Or perhaps ημιπερησιν.

13 The traces of letters will not justify φ]ρβερώτατα. The phrase recalls the ἄγρια φύλα Γιγάντων of Odyssey η 206.

16 Perhaps καὶ has been omitted before κατα.

18 The phrase is familiar from *Iliad* Α 75. It occurs also in The Shield of Heracles, 100. The epithet occurs in the Hymn to Apollo, 157.

20 λασιωτής, though quite intelligible, seems to be a new word.

26 ἐπιλοίβη, cf. Orph. Arg. 603.

COLUMN VII.

τον κα[
 ο δε κα[
 προσ μ[
 νυκκτ[
 5 ανδρα[
 αλλ . [
 πρωτ[
 σεμν[
 εν . ακ[
 10 . . μο . [
 υρ . η[
 τοις κ[
 ω πασ[
 χρυσ[
 15 βαχχ[
 και π[
 παντ[
 κυμα[
 σεμν[
 20 πληκ[
 κολπ[
 ξανθ[
 ευρο[
 ηδυν[
 25 ειιν δω[
 και εκ[

(End of column.)

COLUMN VIII. (*Fragment D.*)

κηθα συν[
 ποντου[
 ουχι ελ[
 γαιην δ[
 5 μη πον[
 τας πη[
 ηστο μ[
 ναμα[
 κλειθ[
 10 αλλας[
 τον στ[
 αμ . . . [

Traces of five lines.
 (Probably nine lines wanting.)

COLUMN IX. (*Fragment E.*)

(Probably two lines wanting.)

Traces of two lines.

. . . . ν δ εν οπφ[θ]α[λ]μοισ[ι
 ολων επερχομενων α . [
 5 θηπτο μαν ες μεγα κυμα . [
 καλην τε ανδρομεδαν εν[
 θηρα δε και βυθιον στρυγερου[
 αυγγελον ουχι καλης βουλ[ης
 αυ]δρεσσιν ο δη κατ επη εη . [
 10 του]ς μεν γαρ φευγοντας [
 .]ντος δ ο καματαος υ[
 τ]ην δε ειδη κε οεσσι βροχ[
 α]λκουνις χηρα παρα κυμ[
 τ]ων κα[ι]νων μυθων ε . [
 15 αυ]τιλαλων γενετων λ[
 εκ]γδοτον αυ[δ]ρομεδαν [
]η[.]ταχει ν . [
]νοσ[.]ουτα . ς τον[
]ννε[.]νετ[.]ομ[
 25] . αιση . [.]κχ[

Traces of four lines.
 (End of column.)

COLUMN X. (*Fragment F.*)

(Probably eleven lines wanting.)

.]νηχους
] . . . αιτον[.]ν αγνην
]αρα την τρισι μορ|φαις
]ον αγλααν κουραν
 5]εσιν οπφθαλμοισιν
τ]ετακγμενοι μυσιται
]σοφον κικλησκουσιν
]σκομοντα προφατη[ν
αθα]νατοισιν επ . θλοι .
 10]ριησιν—
] ελασσφορον α . . α
]παρεχεις φας [η]δυν
]αντικεπαιαν—
]ακλονω[. .]νον . ε

Traces of one line.

(End of column.)

3 Or μορ|φαις.

COLUMN XI. (*Fragment G.*)

(Probably three lines wanting.)

]ησκε . [
] . σεφυσ . [
]αδεκα . [
] . εοιο βυ[. .] . [.] . δ . . . [.] . [
 5]κληρο . [.] [
]υρεου πελαδανδρα[
]μοκχθουσα τε μη . . . ητ . [
] . θαλασσοπ ο [
] . αληντ . . . ν . [
 10]νταλ . [
][. .]ποσε[
] . . φθ . . ν . . . στον δαν[
]σανθ[

- 15]αδουμ οι θαλαττη[
]θρονο[. . .] . . οιο [
]πεστο[. . .]δεον μ . . μ[
]μαλα[. . .] . . ηκε βροτο[
] . φνδ[.] . . . ο . ς δαλησε . [
]μν ερλαιν[
 20] . ογα ερισας λ . [
] . . κο συνηφ[
]ουρ ν απομυ[
] [. . .]οιο φιλο . [
 (End of column.)

COLUMN XII. (*Fragment II.*)

(Some lines probably wanting.)

-]χον . [.]ας
]πεβε . . λνα
]ε φαρετρας
]ας οισσους
 5]ρ επ αυτω—

Traces of three lines.

(Others probably wanting.)

COLUMN XIII. (*Fragment I.*)

(Some lines probably wanting.)

-]γον δ[
]νεαπο[
] . ρμακυμ[
]τ αιγιδας[
 5]λεποι . [

(Some lines probably wanting.)

EDGAR J. GOODSPEED.

POTTERY FROM ZAKRO.

IN the excavations made by Mr. Hogarth in 1902 at Zakro on the east coast of Crete a very large quantity of pottery was found. The article in *B.S.A.* vol. vii., describing the excavation in general, contains a first report on this pottery, and more recently three vases have been published by Mr. Hogarth in *J.H.S.* xxii. p. 333. The task of making a fuller report was undertaken by Mr. J. H. Marshall, but he was unable to complete it. The preliminary sorting which he had done I found was of the greatest use to me when I began work on the pottery. I have also had the advantage of Mr. Hogarth's advice and correction in preparing this paper, for which I wish to express my thanks.

A reference to Mr. Hogarth's original report in *B.S.A.* vii. p. 121, will shew that the pottery came from several distinct sources. There were (1) the pits, which were found full of sherds, entirely unstratified, (2) a group of houses on the lower spur, described as Houses *A*, *B*, *C*, etc. Besides these an early cave burial afforded some specimens of *grey*-faced incised ware, and two geometric tombs were opened.

It will be convenient to describe first the pottery found in the pits. No distinction is made between the yields of the two pits. The remains shewed no traces of stratification; Kamares and Mycenaean vases were found together. I begin with an account of the Kamares ware found.

POTTERY FOUND IN THE PITS.

A.—*Kamares Ware.*

The general characteristics of this find of Kamares pottery are these. Only a few shapes are represented, nearly all of them small, and of these shapes one, the straight-sided cup described below, outnumbers all the rest put together.

The glaze is generally of a deep purple-black covering the whole surface of the fine red clay. In some cases however this black paint is very thin, and applied only partially, so that the red of the clay shews through. In yet other cases the glaze is light red or pink. These different varieties of glaze are found on vases of the same form. The following types occur :

1. Cups of the shape of the Vaphio gold cups (Fig. 1). These are very numerous. Reminiscences of metal technique are seen in the flat bottom

joining the straight sides at a sharp angle, which is marked by a thickening in the clay as for a join between two metal plates, and in the flat strap-shaped handle. The bottoms of these cups shew the marks of the string used to separate the cup from the clay left on the wheel. These markings appear throughout all the Zakro pottery where vases stand on flat bases and not on a raised ring. They are illustrated by Fig. 2.

The decoration is generally of the tendril pattern shewn in Fig. 1, a pattern specially characteristic of the Zakro pottery, but beside this



FIG. 1.



FIG. 2.



FIG. 3.

spirals, festoons, and a pattern of wavy parallel lines are found. Some few cups shew as pattern two big splashes of white paint, one on each side of the cup.

2. Next in order of frequency are small bowls. These range as far as can be seen in their imperfect state from 5.5 to 7.5 cms. in height and from 8.5 to 12 cms. in diameter. Fig. 3 shews a typical example. The lip of the bowl is turned outwards, its bottom is flat. The handle is flat and strap-like, as in the straight-sided cups described above. As with them the entire vase is covered inside and out with black glaze, and the decoration usually consists of the characteristic tendril pattern, which is finished off at the handle by having two tendrils joined by three cross bands, a device which makes the end of the tendrilled branch look like a lily. The upper outside part of the handle bears stripes of white paint, and there are bands (generally two) of the same above and below the tendril pattern on the body of the bowl.

3. Four bowls, whose bottoms only are preserved, shew incised lines drawn round the bowl and picked out with white paint.

4. A group of small vases of the same fine red clay with more or less thin black glaze.

Their shapes are shewn by Figs. 4, 5, 6, 7, 8, 9, 10, 11.

5. The 'hole-mouth' vase shewn in Fig. 12. The clay is covered with thin poor glaze, allowing the red of the clay to shew through. The clay knob on the rim diametrically opposite to the spout is perhaps a reminiscence of a suspension hole.

6. A few fragments of large Kamares vases. The clay is coarser than in the smaller pieces hitherto described, but covered with the same black paint, though generally less lustrous, on which the design is painted in

white. The fragments are mostly mouths of large vases, *Schnabelkannen* and 'hole-mouth' jugs. One amphora-mouth is preserved of the type whose two handles are high up on the shoulder and compress the mouth of the vase into two spouts.

7. A few sherds shewing the geometrical patterns characteristic of earlier Kamares pottery. A further negative point about this pottery from the Pits is the entire absence of any Kamares ware with moulded decoration, though one such piece comes from house K (see Fig. 37 and description below).

8. The broken vase shewn in Fig. 13. There is another handle of such a vase, and a complete specimen has been found at Psychro. The vase



FIG. 4.



FIG. 5.



FIG. 6.



FIG. 7.



FIG. 8.



FIG. 9.



FIG. 10.



FIG. 11.



FIG. 12.

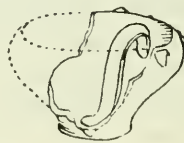


FIG. 13.

is apparently of Kamares technique. The clay is left uncovered except round the rim where there is a wash of reddish-brown hardly lustrous paint. On this are painted rough loop-shaped festoons in white, a characteristically Kamares scheme of decoration. The position of the handle inside instead of outside the body of the vase is very remarkable. The edge of the vase is notched at intervals, the clay at each notch being pinched up into a small lump. I can offer no suggestion as to the use of these vessels.

9. A fragment of a bowl partially covered with black paint, and made of very fine red clay. It is decorated with a spray in white paint. The spray is somewhat conventionalized, and bears pairs of lanceolate leaves, and

between these spikes of small flowers. The design is not in the usual Kamares style, and the fragment stands by itself in this respect. The plant represented is almost certainly the olive in flower.

Of the Kamares ware in general it may be said that only a very small number of forms were found and those not common elsewhere. Among the Kamares pottery found at Palaikastro last year there is only one of the straightsided cups so common here. One bowl from Palaikastro shews a careless modification of the Zakro tendril pattern. Hardly any polychrome work was found; the patterns are executed in simple white upon the black ground. The only exception to this is formed by two or three sherds shewing red paint.

B.—Mycenaean Ware.

This ware has been described generally in the first report in *B.S.A.* vol. vii. Below will be found a detailed list of the principal types found. Amongst a very great number of fragments there were many entire vases. The bulk of them are of the finest Mycenaean technique, with fine slip and lustrous paint.

1. A large number of bowls, mostly in fragments. These bowls have one handle, which is flat and strapshaped. It is put on in the same way as the handle of the Vaphio-type cups described above, and resembles these except that where the handle joins the rim of the bowl a small boss of clay is set in the angle. This boss probably represents the rivet that would be used to fasten the handle in a metal bowl. The rims of these bowls are quite plain and vertical; the bottoms are flat. As far as the fragments permit of measurement these bowls would seem to be some 11 to 14 cms. in diameter and 6·5 to 9 high.

As regards decoration they fall into two classes.

(a) The inside of the bowl is covered with a coat of black paint, and the design reserved for the outside. This bears several concentric bands of paint



FIG. 14.

below, and one round the rim. Between these on the upper part of the bowl is a band of pattern. This is almost always the tendril pattern so common at Zakro.

(b) The outside of the bowl is decorated as in class (a). The inside of the bowl also bears a design. Above a series of concentric rings there is a band of floral design. These patterns are not numerous, and are in general a good deal stylized. Blank spaces between branches of various fixed forms are filled in with rows of half-moon-shaped strokes. Fig. 14 is a development of the inside of one of these bowls which can be restored, and shews the more usual motives employed.

2. Fig. 15 represents a type which occurs also in a few fragments. It is a flattish bowl furnished with two horizontal handles and painted with floral patterns inside and outside.



FIG. 15.

3. Fragments of a number of dishes and basins. These generally have a large flat bottom to stand upon and no rim. Besides floral patterns, a characteristic element in their decoration is a running pattern consisting of a series of parallel wavy strokes of paint at right angles to the direction of the pattern. The paint at the edges of these strokes is shaded off a little,

so that an effect is produced not unlike the grain of wood. The derivation of this pattern from the 'waving' made by indentation in the neolithic ware of Crete has been well demonstrated by Mr. Mackenzie in treating of the Knossos pottery in the present volume of this *Journal*.

Under these three heads falls by far the greater quantity of Mycenaean ware from the pits. There remain to be mentioned a number of more or less solitary vases, remarkable for their form or decoration. Three of these have already been published in colours by Mr. Hogarth in the article in the *J.H.S.* already referred to.

Of these three those numbered 1 and 2 in the plate have been fully dealt with in this article. To put them in connexion with the rest of the pottery it only remains to point out the similarity in shape and purpose between the first vase and the strainer shewn in Fig. 20. This resemblance extends to the form of the handles and the external rim round the waist of the vase. The singularity of the arrangement of the decoration on the strainer figured by Mr. Hogarth consists in the presence of the band of white flowers round the body of the vase below the handles, the normal arrangement being that the main decoration is set higher up on the shoulder of the vase and between the handles. This scheme is exemplified in Fig. 20, and on different types of vases in Figs. 23 and 18.

The decoration of the vase numbered 3 in the *J.H.S.* article calls for some further notice as it has not been there dealt with at any length, and it will therefore be mentioned below.

The more important of the remaining vases are :—

(1) The vase shewn in Fig. 16. Fine clay, pale buff slip, and black paint. The shape of this vase is exactly paralleled by one found at Palaikastro.

Its most remarkable feature is the internal funnel, which runs from the shoulder to nearly the bottom of the vase. The bottom is perforated by a single hole, and there is also a hole pierced through the shoulder.

(2) A handleless vase with a perforated bottom (Fig. 17). The leaf-pattern is executed in black paint on a pale slip with a very free hand, so that the stems of the grass-like plant stray beyond their proper limits. This type of vase usually has a flat vertical handle springing from the neck, and has been found also at Palaikastro and Knossos.

(3) The *Schnabelkanne* shewn in Fig. 18. The body of this vase is covered with a fine pinkish slip; on this is laid black paint, covering the neck,



FIG. 16.



FIG. 17.



FIG. 18.

handle, and base, and forming the three-lobed whorls of the pattern. These whorls are picked out with lines and dots of white.

With the decoration on this vase should be compared that on the third of the vases figured in the article in the *J.H.S.* above referred to. The shapes of the vases are quite different but the decoration contains several common elements. The most important of these is the three-leaved whorl, in this vase filled with bands and spots of white, in the other decorated with a lily. In both cases the leaves of the whorl are relieved with white paint. This whorl is characteristically Mycenaean. The whorl is not however always three-leaved; as often as not it has four leaves. In this form it has been found on a large pithos at Palaikastro, again with the leaves relieved with white paint. The other common element is the arched wavy line that in the vase shewn in Fig. 18 ornaments the leaves of the whorl, and in the vase shewn in the *J.H.S.* appears in bands of three or four, forming the top halves of leaves between and below the whorls.

The lily on this vase is the same as that on the vase from Thera figured in Rayet and Collignon, '*Histoire de la Céramique Grecque*,' Fig. 12. It also occurs on a Kamares cup found at Knossos, and published in *J.H.S.* xxi. Pl. vi. b.

This flower is probably the natural original of the conventional ornament so common on Mycenaean vases, a form of which is shewn in Fig. 18a. The stalk remains the same; the two side petals are represented by the two volutes. The third petal of the flower is diagrammatically represented by the central lobe of the pattern, whose pointed end, formed by the lines of the volutes, gives the general shape assumed by the mass of stamens and the pistil. It may be that this point is due in part to the pattern being as much a stylized iris as a lily, in which case the point will represent the standard petals and the volutes and central lobe the drooping petals of the flower. The pattern occurs in various forms, some so stylized as to have lost the stalk altogether, whilst others have it growing out of the wrong end.



FIG. 18a.

The importance of this vase shewn in Fig. 18 is that its decoration forms a link between the Kamares and the Mycenaean styles. The buff slip and pattern in black are Mycenaean; the black leaves themselves with their pattern in white are Kamares. The connexion between the two is thus more striking when we recognize in the pattern on the leaves of the whorl a pattern that occasionally occurs on the straight-sided Kamares cups found in the pits. For some of the fragments of these have a pattern consisting of a space filled with dots and bounded, as on these leaves, with a wavy line on one side and with a straight one on the other. Fig. 19 represents one of these fragments.



FIG. 19.

A fragment from the pit also illustrates this point. Half of it is covered with a buff slip; the other half by black paint on which is a festoon pattern in white which occurs on some of the straight-sided Kamares cups. Associated with this festoon are half-moon shaped strokes in rows, a pattern noticed above as characteristic of the Mycenaean bowls found in the pits.

Two objects found are of importance from the religious point of view. One is a small cup of unpainted clay bearing on it in relief a crescent and disk, the disk being immediately above and inside the crescent. The other is a fragment of smooth-faced unpainted pottery with the same device in moulded work, except that the crescent bears incised marks making it look like a cable. This device of a disk above a crescent or pair of horns is paralleled by objects found at Gournia.

POTTERY FROM THE HOUSES.

The greater part of the pottery found in the group of houses discovered on the lower spur at Kato Zakro comes from the two houses named respectively A and I. Its generally late Mycenaean character has been described by Mr. Hogarth in his first report, and it only remains here to describe the more important types represented.

A.—*Painted Mycenaean Ware,*

1. Both these houses yielded several strainers of the shape shewn in Fig. 20, some complete and more in fragments. They are made of a fine clay covered with a shining buff slip. The decoration of this example consists of stripes below and a band of pattern round the shoulder of the vase,

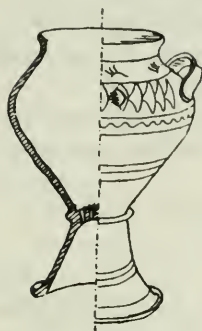


FIG. 20.



FIG. 21.



FIG. 22.

executed in bright buff or orange paint. The pattern is as usual picked out with white paint and in this case consists of a row of axe-blades (Fig. 21). It is to be compared with the double-axe pattern shewn in Fig. 24. The shape of the horizontal handles which consist of a flat strip of clay is



FIG. 23.



FIG. 24.

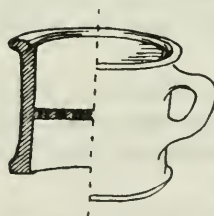


FIG. 25.

characteristic. Midway between the two handles there are little raised bosses. These vases are usually about 16 cms. high.

Similar strainers occur at Palaikastro and at Gournia, but are often much smaller.

2. Of exactly similar technique is the vase from House A shewn in Fig. 22. Three more vases at least of this shape were found in fragments.

3. The same technique is shewn by the vase from House A represented by Fig. 23. The bottom of this vase is perforated. Its pattern is remarkable. Round its shoulder runs a row of double-axes, painted in reddish-orange paint on the buff ground and picked out, as is shewn in Fig. 24, by dots of white. But the double-axis is so far conventionalised as to be treated as a sort of plant, for we see leaves growing from its handle,¹ whilst it is surmounted by a sort of volute. The festoons with which the lip is decorated inside recall a common scheme of Kamares ornament.

4. A fragment of a strainer from House A of the same shape as that shewn in Fig. 25, which comes from a house near the pits, and of the same technique as the vases described above.

This pattern of strainer has also been found at Palaikastro.

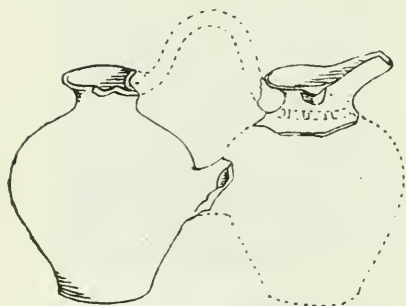


FIG. 26.



FIG. 27.

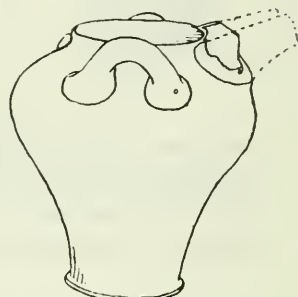


FIG. 28.

5. From House I come the remains of a double vase shewn in Fig. 26. The clay is greyish-green, and there are traces of dull black paint. Exactly similar vases have been found at Gournia. One of the pair of vases has its mouth stopped up, the other has a spout and a strainer in its neck. The two tops are joined by an arch-shaped handle, which is broken away in this instance, but may be safely restored by comparison with the Gournia examples.

6. Some fragments from House A represent a vase that in pattern resembled the vase from the pit shewn in Fig. 18. The pattern is the peculiar three-leaved whorl in black paint, picked out with white, on a ground of buff slip.

7. From House I come two cylindrical vases with narrowed mouths, one of which is shewn in Fig. 27. It has flat horizontal handles like the strainers mentioned above, and rests on three feet. The other example is covered with a pale buff slip ornamented with a fine freely drawn pattern of crocuses. The clay of both is extremely rotten through bad baking.

¹ As in a recently found Knossian treatment of the axe.

8. Both House A and House I yielded spouts of 'hole-mouth' vases and mouths of *Schnabelkannen* of Mycenaean style. Some of these were decorated with black and red paint, sometimes with white added. The upper part of a *Schnabelkanne* thus painted had a raised rim round the neck and three clay knobs on the spout, one on each side and one beneath the lip.

From House G comes the hole-mouthed vase shewn in Fig. 28.

9. From House I came the small jug shewn in Fig. 29. It has yellowish slip, and is decorated with concentric bands of paint roughly laid on, and above them a band of tendril pattern a little different from the form usually found at Zakro. In this form the tendril pattern is found also at Palaikastro, and a precisely similar jug (a little larger) comes from Gournia.



FIG. 29.

10. Fig. 30 shews a large *Schnabelkanne* ornamented with a pattern of spirals round the upper part of the body and having a raised rim round the neck. It is exactly like a vase from Knossos.

11. Modifications of the *Bügelkanne* are shewn by the small vases in Figs. 31 (House I) and 32 (House A). An example was also found in which the handle was reduced to a mere boss. The relation of

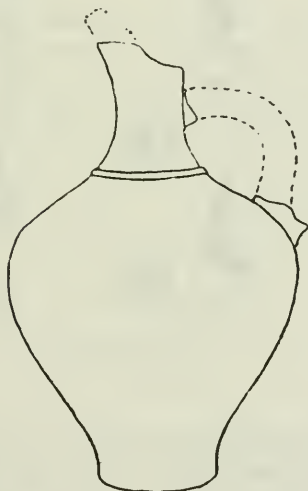


FIG. 30.



FIG. 31.



FIG. 32.

these forms to the *Bügelkanne* on the one hand and on the other to the type of vase with a side spout and open mouth crossed by an arch-shaped handle that is so common amongst early geometric vases in Crete, as at Kourtes, is not clear.

B.—*Unpainted Ware.*

A great deal of unpainted pottery was found in the houses. This was made of a coarser red clay, and was clearly the ordinary domestic pottery of the place. The main types were the following.

1. Funnel-shaped kalathos-like vases like those found at Palaikastro. One of the two found was furnished with two handles inside, crossing one another at right angles.

2. Akin to these were the two vases, one of which is shewn in Fig. 33. Their use must have been the same as that of the kalathi, from which they differ in having not so spreading a mouth but an external handle.

3. Fig. 34 shews one of a class of vessel very common on such sites as Zakro and Palaikastro. The fact that the box part of these vessels often shews marks of burning proves that their use was in some way connected with fire.



FIG. 33.



FIG. 34.



FIG. 35.

4. From House I came the enigmatic vessel figured in *B.S.A.* vii. p. 141 and Fig. 35. The bottom of another was also preserved. The burnt state of this latter and the fact that the holes at the sharp end of the complete example are the same as those in the vessels mentioned just above, *i.e.* one big hole amongst a number of smaller ones, shew that these vessels also were used in connexion with fire. The two handles at the top crossing a longitudinal groove were evidently used for the insertion of a bar, so that the vessel could be moved about when it was too hot to touch. It is possible that they were portable braziers for heating purposes, and used like the *scaldini* of modern Italy.

5. From House I came fragments of a large unpainted *Bügelkanne* with three handles.

6. A number of small (6-8 cm. high) jugs with one handle, and cups with or without handles.

7. House I yielded two amphorae (Fig. 36) with their mouths pinched into two spouts between the two handles which are set high up on the shoulder of the vase. These and another jug from House I with a spout, one handle, and body tapering very much below the shoulder recall very distinctly Kamares forms of household ware.



FIG. 36.



FIG. 37.

From House K came the fragment that made up into the barbotine filler represented in Fig. 37. This is the only piece of this ware found at Zakro. The zone adorned with bosses seems to have been entirely covered with black paint. On the smooth part of the vase the black paint forms a pattern of small sprigs powdered over the ground. This vase is interesting as shewing the survival of the barbotine style of decoration into late in the Mycenaean period. The exaggerated character of the bosses on this vase however clearly shews a much more advanced and even a decadent stage of this style of decoration, if it be compared with the neatness and smallness of the bosses used to decorate the earlier polychrome Kamares ware.

The most important general conclusion to be drawn from this pottery is that, at Zakro at all events, the manufacture of Mycenaean and of certain classes of Kamares ware was contemporary. This is shewn not only by their common use of the same patterns, notably the tendril pattern, but also by the existence of vases which display the two techniques. On these vases, which have the bright buff slip characteristic of Mycenaean ware, a black ground is laid on which a true Kamares pattern in white is painted.

Side by side with this it must be noted that several kinds of Kamares ware do not occur at Zakro. Vases with embossed patterns like metal-work or raised ornament are not found, with the exception of the filler described above. The geometrical patterns of the early Kamares style only appear on a very few fragments. Except a few fragments with red paint the only colour used is white; the yellow ochre found elsewhere does not occur here. This

would tend to shew that these are all characteristics of an earlier school of Kamares manufacture, and that the inhabitation of Zakro is to be placed late in the Kamares period, at a time when good Mycenaean ware was already being made.

It has already been suggested by Mr. Hogarth that the pits were receptacles for accumulations of votive offerings cleared out of a shrine. This is rendered still more probable by the uniform character of the pottery. We have seen that in the pits two classes of vase are immensely more common than the others. These are the straightsided Kamares cups and the Mycenaean bowls. They were not found in the houses, and were therefore not used for domestic purposes. Their uniformity makes it probable that they were regularly used for votive offerings. Religious conservatism would tend to consecrate certain types of vessel for this purpose.

Very little plain domestic ware was found in the pits, such as appeared naturally in the houses. The sacred character of the former is also indicated by the presence of the small cup described above bearing the crescent and disk in relief.

The generally later character of the pottery in the houses, which yet contain specimens of the finer pottery found in the pits, points to the conclusion that the town was continuously inhabited from the time indicated by the earliest ware in the pits up to the time of the desertion of the place, which is assigned by Mr. Hogarth to the end of the Mycenaean period.

The shrine connected with the pits must have been the sacred place of the town. The earlier character of the pottery of the pits is natural. A receptacle for votive offerings would contain more old offerings than new ones, whilst a house contains as a rule only the pottery in use when it was deserted. Still more would a pit used to receive an accumulation of its votive offerings present an earlier appearance. The absence from the pits of votive objects as late in character as the latest ware in the houses is natural if we suppose that the pits contain accumulations for which there was no longer any room in the shrine. For the latest offerings made at the shrine would never have been put into the pit at all.

R. M. DAWKINS.

NOTES ON THE GREEK FOOT RACE.

I.—THE ARRANGEMENTS OF THE STADIUM.

THE recent discoveries at Olympia, Epidaurus, and Delphi have forced us to modify the old idea of the Greek race course based on the stadium of Athens and the Roman circus. It may perhaps be useful shortly to state the evidence which we now possess.

A.—*The Homeric Race Course.*

Running is the most universal, the oldest of all forms of sport, and the primitive form of a race is that which the competitors run from one point to another—the germ of the stadium or straight race—or where they race round some distant object and back to the starting place—the germ of the diaulos and other turning races, as the Greeks call them (κάμπειοι). This simple type of race, which we may see to-day at school treats and rustic meetings, requires no apparatus but two posts, stones, or other objects to mark the starting point, and the finish, or turning point; and it is this primitive type that we find in Homer. In the twenty-third Iliad¹ Achilles places the heroes in a row and points out to them the τέρματα afar off, not the goal, as we can see by comparing the similar expressions used of the chariot race, but the turning point. In the chariot race this was a withered stump a fathom's height above the ground, with two white stones set on either side, and by it Achilles set an umpire, godlike Phoenix, 'that he might note the running and tell the truth thereof.' Just such a figure appears in later times on vases² standing with his forked rod beside the turning point ready to chastise any offence or breach of the regulations. The starting point in Homer is called νύσσα, a word generally used of the turning point, but signifying merely a 'meta' or post, and so equally applicable to either end.

B.—*The Hippodrome type of Race Course.*

From this primitive type two types of race course are derived. The first we may call the Hippodrome type, where as in Homeric days the horses or men race round two posts, connected by one or more intermediate posts, or

¹ Iliad xxiii. 757, cf. 358-361.

² Cf. Hartwig, *Meisterschalen* xvi.

by a low wall like the 'spina' of the Roman circus. This type of course was not confined to horse racing, and though generally superseded in foot races by the more elaborate arrangements which we find at Olympia and elsewhere, it reappears in later times when the glory of the foot race has already declined with the growth of professionalism and luxury. Thus the stadium at Athens first built by Lycurgus in the 4th century B.C. and magnificently rebuilt by Herodes Atticus in the 2nd century of our era was divided by a low wall running down the middle and connecting three pillars, one of which, a square pillar with the heads of Hermes and Apollo set back to back, is in the museum at Athens. A similar arrangement is described by a scholiast to Soph. *Electra* 691, who mentions three square pillars bearing on either side an inscription, the first ἀρίστευε, the second σπεύδε, the third κάμψον. A distinctive feature of these later courses is the semi-circular theatre or σφενδόνη at one end or, as in the Roman circus, at both ends. This circular ending, which doubtless served for various gymnastic or other contests, does not belong to the earlier type of course which we find at Olympia, and in the case of Delphi it seems to have been a later addition.³ In a course of this description the runners were not separated in any way from one another and opportunities for foul play must have been frequent, especially at the turn. That such foul play did occur is proved by the regulations against tripping or otherwise interfering with an opponent.⁴ According to a tradition preserved by Statius⁵ such an incident occurred at the founding of the Nemean games, when Idas seized Parthenopaeus by the hair and so prevented him from winning. Adrastus directed that they should run the race again and that to prevent a repetition of such tactics they should run on opposite sides of the course. Again, Vergil⁶ represents Nisus as purposely tripping Salius. These practices if they belonged to Greek times at all must have been confined to the type of race course described, or to races run in the same way.

C.—The Starting Arrangements. The ὕσπληξ.

Of the method of starting on such a course we cannot speak with certainty. The two primitive methods of starting are by means of a line drawn in the sand,⁷ or by a rope placed in front of the competitors, which is dropped at the moment of starting. This latter method was undoubtedly employed in the chariot races. At Olympia the chariots were arranged in pairs along the sides of an isosceles triangle, the apex of which pointed to the right of the first 'meta.'⁸ At a given signal the ropes or ὕσπληγες in

³ For the stadium at Athens v. Frazer, *Pausanias* ii. 205; at Olympia v. Olympia ii. 63 and Frazer, iv. 78; at Delphi, *B.C.H.*, 1899, pp. 601-615; at Epidaurus v. Frazer, v. 576.

⁴ Luc. *cal. non tem. cred.* § 12; Paus. v. 24. 2. v. Krause, *Gymnastik der Hellenen*, p. 363,

n. 1.

⁵ Stat. *Theb.* vi. 616.

⁶ *Aen.* v. 335.

⁷ Schol. to Pind. *Pyth.* ix. 118 ἐχάρασσον δὲ γραμμὴν τινα, ἣν ἀρχὴν καὶ τέλος εἶχον οἱ ἀγωνιζόμενοι.

⁸ Paus. vi. 20.

front of the pair nearest the base were dropped; as this pair drew level with the next pair the next ropes fell, and so on until the whole field were fairly started. The plural ὕσπληγες therefore came to denote 'the starting place,' and the phrase ὥσπερ ἀπὸ μιᾶς ὕσπλαγίδος⁹ is used proverbially in Aristophanes to describe a simultaneous start. It is difficult to decide how far the use of this term as applied to the foot race is metaphorical, how far it is based on fact. In the epigram written by Antipater on the celebrated Ladias

ἡ γὰρ ἐφ' ὕσπληγων ἡ τέρματος εἶδε τις ἄκρου
ἡΐθεον, μέσσω δ' οὐ ποτ' ἐνὶ σταδίῳ¹⁰

the word may be used metaphorically. But the use of a rope in starting is distinctly implied in the somewhat obscure words of Lycophron

ἐγὼ δ' ἄκραν βαλβίδα μηρίνθου σχάσας
ἀνειμι λοξῶν εἰς διεξόδους ἐπῶν
πρώτην ἀράξας νύσσαν ὡς πτηνὸς δρομεύς.¹¹

And a much later writer Heliodorus in his fanciful description of an armed race describes the start by the words

ἔσχαστο μὲν ἢ ὕσπληξ, τέτατο δὲ ὁ δρόμος.¹²

More convincing evidence is afforded by an inscription published in the 'Eph. 'Arch. 1884, 169, referring apparently to repairs of the stadium, in which occur the words

ἀφέσεις τὰς ὑπὸ τῶν ὕσπληγων τοῦ παναθηναϊκοῦ σταδίου.

From these words and from the expression of Lucian ἔπεσεν ἡ ὕσπληξ,¹³ we may infer that the rope was raised some height above the ground; from the use of the word σχάζειν, which denotes opening or slitting something tight like a vein or a haggis, we may conclude that the rope was stretched tight. Moreover it must have been dropped or let go very suddenly and pulled away quickly to avoid entangling the runners' feet, and this sudden loosening of the tight rope was accompanied by an audible sound which is referred to in the epigram on Pericles.¹⁴

Dr. Hauser¹⁵ has tried to identify the ὕσπληξ on two vases, a Bourguignon skyphos which I shall discuss later,¹⁶ and a kylix in his own collection. But M. de Ridder¹⁷ has pointed out that in the former the supposed line is too indefinite to be of any value, and even if it is a rope, it is resting on the ground; while on Dr. Hauser's kylix the line which passes through the hoplite's right hand may with more probability be regarded as a spear: for the identical position occurs on a Pamphaeus kylix in the Louvre (G. 5),

⁹ Aristophanes *Lysistr.* 1000.

¹⁰ *Anth. Pal.* ix. 557.

¹¹ Lycophron 13.

¹² *Aeth.* iv. 3 f.

¹³ Lucian, *Tim.* 20.

¹⁴ *Anth. Pal.* xi. 86

τὸ στάδιον Περικλῆς εἶτ' ἔδοαμεν, εἶτ' ἐκάθητο

οὐδεὶς οἶδεν ὅλως· δαιμόνιος βραδυτής·

ὁ ψόφος ἦν ὕσπληγος ἐν οὐασι καὶ στεφανοῦτο
ἀλλὰ καὶ Περικλῆς δάκτυλον οὐ πρόεβη.

¹⁵ *Jahrb.* 1895, p. 193.

¹⁶ P. 282, Fig. 10.

¹⁷ *B.C.H.* 1897, p. 233.

where there can be no doubt that the object is a spear. The proposed identification must therefore be regarded as a failure.

It appears then from the evidence that a rope was sometimes used for the start of the foot race. This practice was probably borrowed from the Hippodrome, and at a late date when the importance of the foot race was decreasing. A starting rope would be superfluous with the elaborate starting arrangements of Olympia; indeed there is direct evidence that it cannot have been used. With a rope, just as with the starting gate which has been introduced of late years in the horse race, there is no possibility of poaching at the start or of a false start. Yet such incidents were quite familiar to the Greeks. In the council before Salamis Adeimantus says to Themistocles, *ἐν τοῖσι ἀγῶσι οἱ προεξανιστάμενοι ῥαπίζονται*.¹⁸ How could a runner start too soon if kept back by a rope? Again in Aristophanes, *Eqvites* the sausage seller protests against Cleon's trying to steal a march on him, *ὑποθεῖν οὐκ ἐῶ*¹⁹—no poaching at the start. How could he start before him if they were both kept back by a rope? In later times Plutarch describes the runners at Olympia as *σπουδάζοντας περὶ τὴν ἄφεσιν ἵνα πλεονεκτήσωσιν*,²⁰ and Julian implies that those who started too soon were called back to the start.²¹ Such passages are incompatible with the use of the *ὑσπληξ* and when we set beside them the constant allusions in writers of the 5th century to the *γραμμὴ* or starting line²² we are led to the conclusion that the use of the *ὑσπληξ* in the foot race was a late invention, and even then never became universal and was only used in the Hippodrome type of course with its *νύσσαι* or its *spina*, and not in the type with which recent discoveries have made us familiar.

D.—*The Stadium of Olympia.*

This second type is fitted only for foot races. There are no posts nor wall down the centre of the course, which is a long rectangle, terminated at either end by a row of stone slabs. At Olympia these slabs are 4 ft. 2 in. long and 1 ft. 6 in. broad, divided from one another by square sockets, obviously intended to hold posts. There are twenty of these slabs at either end at Olympia and each slab is marked longitudinally by two parallel grooves about seven inches apart. Similar slabs have been found too in the Gymnasium to the west of the altis. These grooves were clearly meant to mark the position of the runners' feet, not so much in order to give a firm grip for the toes, much less for the heels as has been asserted,—for a slight roughening of the stone would have been far more effectual,—but rather by defining the position of each foot to ensure a fair start. At Delphi we find a similar arrangement; but the lines on the slabs, of which there were probably seventeen, are nearer to each other, only 3½ inches apart. At Epi-

¹⁸ Hdt. viii. 59.

¹⁹ *Eq.* 1162.

²⁰ Plutarch, *Apophth. Lac.* (*Leont. fil. Eurycr.* § 2).

²¹ *ἐπὶ τὸν ἐξ ἀρχῆς ἐπαγάγομεν ὥσπερ οἱ προεκθέοντες ἐν τοῖς δρόμοις* (Julian *περὶ βασιλείας*).

²² *γραμμὴ*, Aristoph. *Acharn.* 481. Eurip. *El.* 955. *Frag.* 169. Pindar, *Pyth.* ix. 118.

daurus the lines are about 4 inches apart, but the stone sill only occurs at one end of the race course and there are only eleven pairs of lines. It seems probable that there was originally a second stone sill at Epidaurus also, but all trace of this has disappeared owing to the shallowness of the soil. The object of having a stone sill at both ends was to enable all the races, whether over the single or double course, to finish at the same point. On a course with only a single sill, if there were any such, the winning post for the stadium must have been at the opposite end to that for the other races. In front of the stone sill at Epidaurus are seven stone pillars which seem to be remains of a later arrangement for starting, perhaps resembling the Roman carceres. A relief published in the *Röm. Mitth.* 1890, p. 156, Taf. 7, representing runners apparently about to take their place behind a wooden barrier, perhaps shows us such an arrangement, but it is probably connected with the Roman circus rather than with the Greek stadium, and in the present state of our knowledge we can say nothing definite of these later arrangements at Epidaurus.

In these stone slabs we have the *βαλβίδες* or thresholds, a word which Philostratus uses in the singular to express the platform on which the diskobolos stood,²³ and we can now understand why this word like *ὑσπληξ* is commonly used in the plural. The lines on the slabs are the *γραμμαί*, the development of the line which, according to the scholiast to Pindar,²⁴ men used to dig to mark the start and finish. A passage in Eustathius seems to describe this system accurately: *ὥσπερ ἐν τοῖς δρομεύσιν οὕτω καὶ ἐν τῇ ὀρχήστρᾳ γραμμαὶ τινες ἐγένοντο, ἵν' ὁ χορὸς ἰσπῆται κατὰ στίχον.*²⁵ In a most interesting inscription discovered at Delphi and published in the *B.C.H.* 1899, we find these stone sills also called *καμπτήρες*, or turning points, a word which properly describes the posts which separated the *γραμμαί*.²⁶

This inscription contains details of expenses incurred in the archonship of Dion (B.C. 268) in preparing for the Pythian festival. First the ground, which had possibly been used as pasture land, had to be thoroughly cleared. This *ἐκκάθαρσις* cost 15 staters. Then it was dug up and rolled, the *σκαψίς καὶ ὀμάλιξις* costing a further sum of 110 staters. Six *ἐπισκαφέια* or picks for harrowing were provided for digging the stadium and the jumping places or *ἄλματα*. Finally the course was covered with a layer of white sand, 600 medimnoi being provided at a cost of 1½ obols per medimnos. This inscription should finally dispose of the fiction that the Greeks ran races in deep sand. From Lucian's²⁷ *Anacharsis* we learn that they practised running in sand as a severe form of training, but this does not prove that they raced under such conditions at the great festivals, any more than Aristotle's remark²⁸

²³ Phil. *Imag.* i. 24.

²⁴ *Pyth.* ix. 118.

²⁵ Eustathius, *Il.* ix. p. 772. 9.

²⁶ The sum of 36 staters was spent on the *καμπτήρες*, *B.C.H.* 1899, p. 565.

H.S.—VOL. XXIII.

²⁷ Lucian, *Anacharsis*, 27.

²⁸ Arist. *De Gressu Anim.* p. 709. οἶον ἐν ταῖς παλαίστραις οἱ διὰ τῆς κονίας προϊόντες ἐπὶ τῶν γονάτων.

about running on their knees in the Palaestra proves that they raced on their knees.

One more point remains. What was the use of the square sockets between the slabs? They were evidently meant for pillars, and it has been suggested that the course was roped as it is in the present day for the Hundred Yards Race. For this suggestion there is, I believe, no direct evidence, but we can understand how necessary it would be for every runner to have some definite point for which to run. Without such a point it would be very difficult to run straight in a broad track like that of Olympia, and we may therefore assume that even if the course were not roped the various posts were distinguished in some way or other so that each runner would run straight for the post opposite him, and that probably the line was marked in some way. Such a line would help to explain the phrase *δραμεῖν ποτὶ στάθμην* (Pind. *Nem.* vi. 7). Prof. Bury states that *στάθμη* in Pindar never means 'a goal' but rather 'a measure or rule' and the phrase means 'to keep to one's course.' The word might well denote the line, however marked, which connected the starting post with the post opposite it, the line to which each runner had to keep.

E.—*Heats.*

The arrangements at Olympia probably represent the usual arrangements of the course, at all events at the great festivals. A few words must be said about the question of heats (*τάξεις*). Our only information on this point is derived from Pausanias vi. 13. 2. The text of the passage is corrupt, but it appears that in the stadium race the competitors were divided into heats of four, the winners of which ran in the final, so that the winner had won twice, once in his heat and once in the final. This seems conclusive with regard to the stadium race. The race was the most important of all the athletic contests. The winner of the stadium race gave his name to the Olympiad, and in an Athenian inscription which enumerates the prizes for the Panathenaic festival²⁹ the winner of the stadium race receives ten amphorae more than the winner of any other event. It was natural therefore that particular pains should be taken with the arrangements for this race, but it does not follow that the same system was applied to the *dianlos* or even to the stadium race in the Pentathlon. In the latter it would have been undesirable to lengthen the competition by heats unless absolutely necessary, and the starting lines at Olympia allowed room for twenty to start together. In the *dianlos* possibly only half that number could have run; but it does not seem likely that the entries were large. The thirty days' training at Olympia must surely have led to the weeding out of those who had no chance. At all events we may feel certain that in such a trying distance as 400 yards heats would have been avoided if possible. Else the triple victor who, having won two or more heats in the *dianlos* and two or more in the stadium, proceeded on the same day to win the long race, would

²⁹ *C. I. A. ii.* 2 965.

have been indeed a marvel. From the obscure and corrupt passage in Sophocles *Electra*, 691-2, it is impossible to argue. If heats were unlikely in the diaulos they were much more unlikely in the long race, the distance of which is variously given as 7, 10, 12, 20, 24 stades.³⁰ The origin of this divergence is undoubtedly due to the fact that the distance varied at different festivals and at different times, just as in the present day. For Olympia the evidence is slightly in favour of a 24 stades race. But whether the race was one mile or three, there can have been nothing to prevent large numbers running together for such a distance, and heats would have been as tedious to the spectators as trying to the competitors. An epigram on one Charmos³¹ mentions 7 men running in the long race, and suggests a possibility of twelve running together. According to another epigram³² Hermogenes of Antioch beat nine competitors in a race. Such passages are sufficient to refute the idea that the Greeks always raced in heats of four.³³

F.—*The manner of running the various races.*

The next point to be considered is the manner of conducting the various races. The stadium race offers no difficulty: each runner ran straight to the post opposite his starting point. The question of the diaulos is more difficult. The centre socket in one of the lines at Olympia is larger than the others and Dr. Dörpfeld is of opinion that in the diaulos the other posts were all removed and only the central one was left, round which all the competitors raced. This theory is open to two objections. Those who started on the outside would have further to run than those who started in the centre. This inequality, amounting at the most to a yard, is not a really serious consideration in a race of 400 yards. It becomes more serious however when we consider the nature of the turn. In a race of this distance the runners would not be much separated in the first two hundred yards, and much confusion and crowding would result in turning sharply round the post. Everything would depend on reaching the halfway post first in order to avoid the confusion and delay in making the turn. Hence the loss or gain of a yard at the start might cause the best runner to be crowded out at the turn, and enable an inferior one to turn without trouble. Accordingly Flasch, Hauser, and others maintain with some plausibility that in the double race each man ran not to the central post but to his own post and then turned. At the same time we must remember that such crowding at the turn was allowed in the chariot race and it is impossible without further evidence to determine the point. But supposing that the separate posts

³⁰ Krause, *Gymnastik der Hellenen*, p. 348.

³¹ *Anth. Pal.* xi. 82.

³² *Anth. Pal.* vi. 259

ἔτρεχε γάρ; καὶ πρῶτος ἔλδν τίνas; ἐννέα παῖδας.

³³ Mahaffy, *Rambles and Studies in Greece*,³ p. 310. Mahaffy speaks of an ἐφεῖρος but I

can find no proof of the existence of a bye in the races, though proofs are frequent of a bye in wrestling and boxing. The analogy of the chariot race where we hear of ten chariots racing together (Soph. *Electra*) is an additional argument against the general use of heats.

were used, how did they turn? Did they touch the post or toe the line and turn back along the same course by which they had come? Or did they turn to the left round the post to the left and return along a parallel course? The evidence seems to me slightly in favour of the latter view. The name 'diaulos' signifying a double channel seems in favour of it; so too is the passage in which Pausanias explains the method of writing *βουστροφηδόν*³⁴ by comparing it to the diaulos, or again the line in the *Agamemnon* of Aeschylus 343,

κάμψαι διαύλου θάτερον κῶλον πάλιν.

The analogy of the chariot race and the Homeric race supports this view, and the use of the words *καμπτήρ* and *νύσσα*, which Pollux defines as that point *περὶ ὃ κάμπτουσι*, though these words may refer to the Hippodrome or to the type of stadium which resembled it. Possibly a further confirmation of this view may be found in the vase paintings which I propose to discuss in connection with the armed race, though in this case it seems to me certain that the competitors raced round one common point and not round separate posts. But whatever was the case in the diaulos there can be no doubt that in the long race all competitors raced round the central posts at either end. In a long race the runners soon spread out; the pace is less and the difficulty of the turn is minimised. Moreover the system by which each man keeps to his own track, though convenient in a short race, is actually inconvenient in a long race when each lap has to be registered and each turn watched by the officials, and the runners themselves would find it difficult to know how they stood with regard to their fellow competitors. A Panathenaic amphora published in *Mon. d. I.* i. 22 actually shows four long distance runners running to the left towards a rough post. The foremost runner has just reached the post, his left foot just passing it, but he has not yet turned. The post of course might represent the finish, but the style of the running is opposed to this. To sum up: the separate posts were certainly used in the stadium race, possibly in the diaulos, but certainly not in the long race, which was run in the same way as the chariot race.

II.—THE EVIDENCE OF VASE PAINTINGS.

A.—*Style of Running.*

So far vase paintings have been of little use in our enquiry: but when we come to the style of the running and especially to the conduct of the armed race, vases are our chief authority. The difference of style between the Stadiodromos and the Dolichodromos as we see them on the Panathenaic vases is familiar to every one. Of the long distance runners I need say only that they are a model of style for all time³⁵; but the style of the sprinter as he advances by a series of leaps and bounds swinging his arms like the sails

³⁴ Paus., v. 17. 3.

³⁵ *Mon. d. I.* x. 48. e. 4 and f. 6.

of a windmill³⁶ is apt to provoke a hasty smile.³⁷ Hasty, I say, because it neglects to take account of the extreme difficulty of depicting a sprinter, and of the character of the vases on which we see him. These are for the most part Panathenaic vases, prize vases which contained the oil given to the victors. The artists were limited to certain set subjects treated, as is natural with vases thus produced, usually in a conventional way, and not always drawn with great care. Many of those which have been preserved to us are archaic, many more are archaistic, and at first sight the archaic is always apt to produce a smile. But if we make allowance for these facts, instead of laughing we shall rather wonder at the truthfulness with which, in spite of a sometimes grotesque exaggeration, the artists have really depicted the essential points of a sprinter, running on the toes, raising the knees, and using the arms. Homer is true to nature when he tells how Odysseus, as he neared the finish, prayed to Athene and she made him light both of hands and feet.³⁸ So Philostratus says that the Stadiodromoi use their arms to increase their pace, *οἶον πτερῶμενοι ὑπὸ τῶν χειρῶν*,³⁹ while the long distance runners only do so at the end of the race, *i.e.* in their sprint. In the present day nearly all sprinters make use of their arms, though the exaggerated use is not recommended; one well-known sprinter is described in the Badminton *Athletics* as a vision of whirling arms and legs. One has only to compare the Stadiodromoi on a Panathenaic vase with an instantaneous photograph of a hundred yards race to realise that in spite of stiffness and conventionality the Greek artist was not far from the truth. The action of the armed runners is, as we should expect, more violent than that of the long distance runner, less violent than that of the sprinter. M. A. de Ridder in a paper to which I shall have to refer at length⁴⁰ wrongly describes the Hoplitodromos as advancing by a series of leaps and bounds. The two examples figured in the *Mon. d. Inst.* x. 48. e. 3 and g. 9 are sufficient to refute this; the first, an amphora now in the British Museum,⁴¹ dated 336 B.C., shows four runners making a very moderate use of the arms and running on a perfectly flat foot; the second amphora, now in the Louvre, belonging to the year 323 B.C., shows three runners running on the toes, but with the right arm close in to the side as we see it in the long distance runners. The obvious inference is that the style of the armed runner comes between the styles of the sprinter and of the long distance runner.

B.—*The attitude of the Start.*

In connection with the armed race a number of questions have been raised by Dr. Hauser in the *Jahrbuch* for 1887 and 1895. In these articles Dr. Hauser tries to determine from vase paintings

³⁶ *Mon. d. I.* x. 48. f. 7, Gerh. *A. V.* 259; cf. a very beautiful representation of winged runners published by Miss Hutton *B.C.H.* 1899, p. 158.

³⁷ Mahaffy, *Rambles and Studies*,³ p. 308.

³⁸ *Il.* xxiii. 772.

³⁹ *Phil. Gymn.* 32.

⁴⁰ *B.C.H.* 1897, p. 222.

⁴¹ *B. M. Vases* B. 608.

- (1) the position of the start,
- (2) the manner of the turn in the *diaulos*
- (3) the length and general arrangement of the armed race.

His conclusions have been assailed by M. A. de Ridder in the *B.C.H.* for 1897. Both writers appear to me to prove too much, and as I am unable to agree with either of them, I will venture to suggest a third view which is really a compromise between the two.

First, as to the position at the start. In the Tübingen bronze statuette,⁴² formerly described as a charioteer, Dr. Hauser believed that he recognised an armed runner whose shield had been broken off, and after much hesitation he decided that he was a runner ready to start. The bronze represents a bearded athlete with the right foot a few inches behind the left foot, almost level with the instep. Both knees are slightly bent, the body leans slightly forward; the left arm which once carried the shield is bent and drawn somewhat back, while the right arm is extended to the front slightly below the level of the shoulder. The whole attitude is that of a man at rest, but on the alert and expectant, ready for immediate action. Closely parallel to this figure is a red figured amphora from Naples, now in the Louvre,⁴³ showing



FIG. 1. R. F. AMPHORA IN THE LOUVRE.

an armed runner in an almost identical position but with the body stooping forward a trifle more (Fig. 1). Opposite him is a draped figure with the right arm extended to the front and the hand bent backwards and upwards, an attitude which according to Dr. Hauser signifies 'Halt!' It is precisely the gesture of a photographer as he says 'keep still please,' and is most appropriate to a

⁴² *Jahrb.* 1886, Pl. ix.

⁴³ *Bull. Nap. cour. sc.*, vi. 7.

steward starting a race. Still closer to the Tübingen bronze is the figure on a Leyden kylix,⁴¹ but in this case the official is replaced by a pillar which stands in front of the right arm of the athlete. It might well be one of the pillars at either end of the stone sill which we have found marking the start at Olympia. The same attitude recurs on a Berlin kylix⁴² which represents the whole course of the armed race (Fig. 6). The right-hand figure of the three, whom I take to be on the point of starting, only differs from the previous figures in that the right foot is to the front, and the left heel is accurately represented as raised slightly off the ground with the result that the left knee is somewhat more bent than the right. The body too is bent more forward, in which respect it resembles an unarmed runner on a vase figured by Krause xv. 55,⁴³ which seems to me beyond all doubt to represent an



FIG. 2.—R. F. KYLIX, FORMERLY AT NAPLES. (After Dubois-Maisonneuve).

athlete practising starts in the Palaestra (Fig. 2). The athlete stands beside the pillar, the right foot foremost, the left heel slightly raised. He bends forward, his body almost horizontal, the right hand extended to the front and towards the ground, while the left arm is carried somewhat backwards for the sake of balance. A draped figure carrying a forked staff seems about to give the word to start. Lastly in a vase figured by Hartwig⁴⁷ we see another unarmed athlete standing by a pillar in the precise position of the Tübingen bronze, except that as he has no shield to inconvenience him both hands are stretched to the front. Perhaps we may add to these the statue of the Victorious Running Girl in the Vatican, but the identification of this with the start is very doubtful.

There can be no doubt that the motive in all these figures is the same,

⁴¹ *Jahrbuch*, 1887, p. 99.

⁴² *Ger. A. V.* 271.

⁴³ The vase is figured in Dubois-Maisonneuve, *Taf.* xxv. and Inghirami, *Mon. Etrusc.* v. 2. *Taf.* lxx. It was at Naples, but I have failed to discover where it is now. This is the more

to be regretted as the differences between the two drawings show that they cannot be accurately drawn.

⁴⁷ *Meisterschulen*, p. 45, f. 6; cf. a similar figure on a vase belonging to Sir F. Cook described below p. 288.

but do they represent the start? The most important point in which they all agree is the position of the feet; a point which is to my mind conclusive, inasmuch as it corresponds accurately with the position required by the two lines on the slabs which mark the start at Olympia, Epidaurus, and Delphi. These lines are from 4 to 7 inches apart, and the hind foot on all the vases I have mentioned and in the Tübingen bronze is level with the heel or instep of the front foot. This position of the feet is decidedly unusual and determines the whole attitude of the body; and the agreement between the starting lines and this position of the feet is the very strongest proof that the moment represented is that of the start. Unfortunately Dr. Hauser, not appreciating the importance of this point, confines his attention to the bend of the knees, and extension of the hands to the front. This neglect of the position of the feet has led him to assign to the same motive vases representing several distinct motives. With the vases which I have mentioned as really showing the start, he compares a number of vases showing two types not of running, but of jumping. In one type the feet are absolutely parallel, the legs together, and the knees very much bent, while both hands are swung to the front (Figs. 3 and 4). In one of these vases the performer is actually standing on a raised

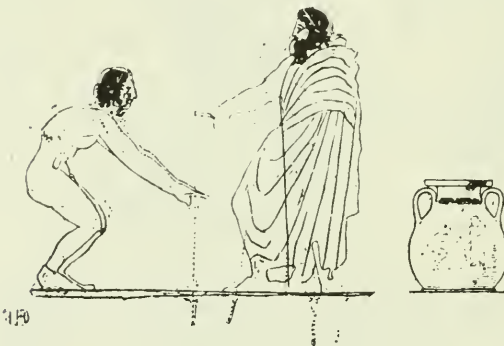


FIG. 3.—PELIKE BELONGING TO
DR. HAUSER.



FIG. 4.—R. F. KYLIX,
MUNICH.

ATHLETES JUMPING WITHOUT HALTERES.

stand (*βατήρ*).⁴⁸ In the other type the legs are more or less separated, the hind leg alone is bent, and the position represented is almost identical with that of the jumper on the Berlin or British Museum bronze disks.⁴⁹ Both series are extremely interesting as showing undoubted types of jumping without weights, but the discussion of them comes under the heading of jumping, not of running. Other vases are grouped under the same head by Dr. Hauser because he has failed to consider the general intention of the painter. For example in the black figured oinochoe in the British Museum⁵⁰ showing a

⁴⁸ Hancarville, *Ant. étr. gr. et rom.* T. iii. 66. Krause ix. 23, Hauser, *Jahrbuch*, 1887, p. 106. cf. *Jahrbuch*, 1895, Figs. 3, 4 in Hauser's

article, and B.M. E. 101.

⁴⁹ *Jahrbuch*, 1895, *loc. cit.* Figs. 7, 8, 9, 10.

⁵⁰ B.M. *Vases* B. 628.

Hoplitodromos standing in a statuesque attitude upon a raised bema, the obvious intention of the artist is to represent not a living athlete but a statue. This is shown by the stiff attitude of the Hoplitodromos, the gesture of the priest or worshipper who stands before the figure, and the presence of the pedestal. Or again to take another vase in the British Museum,⁵¹ the long thin athlete who is stretching out his hand with a mocking gesture must not be separated from the short, fat-bellied boxer opposite to him (Fig. 5). The motive



FIG. 5.—R. F. KYLIX IN B.M.

is, as Mr. Cecil Smith explains, obviously humorous, and represents some altercation between the two.⁵² Perhaps the fat boxer has challenged the other to decide the dispute with the gloves! One feels tempted to ask whether the artist may not be caricaturing some characters of his own time. But Dr. Hauser does not seem to realise that Greek athletics and the Greek palaestra had a lighter side, that Greek life was full of humour, and much study had not blinded the Greek artist to the appreciation of humour. Again, apart from the context of the figure, its position has but a superficial resemblance to the series which represent the start. The position of the feet is not the same, they are all but parallel. But let that pass. In the Tübingen bronze and the figures resembling it, the body rests chiefly on the front leg, or on both evenly, and both knees are bent. Here the weight of the body is on the back leg, the knee of which is absolutely straight, and the whole balance of the body is changed at once. The position of the feet and the balance of the body are the essentials in deciding whether any particular figure represents the start of a race. Dr. Hauser by paying attention to superficial points is led little by little away from the original position till he

⁵¹ B.M. *Vases* E. 6.

⁵² Cf. Zannoni. *Scavi di Bologna*. Taf. xxii. where the central figure is clearly talking to the

Paidotribes, and the supposed resemblance of the attitude to the Vatican Running Girl is utterly worthless.

ends by confounding together types that are absolutely contradictory. To verify this, one has only to put oneself into the various attitudes and try the effect of a few starts in each attitude.

Setting aside these vases which clearly represent other types let us consider how far the general attitude represented by the Tübingen bronze is consistent with our interpretation of it, as a runner starting. Several objections have been raised. Dr. Hauser hesitated long before adopting this view on account of the 'starke Kniebeugung.' Indeed in his first article he concluded that the movement shown was not that of the start, but that of the restart after the turn in the diaulos, a view which he only abandoned from the false analogy of a figure representing a Lampadedromos, which I propose to discuss later. M. A. de Ridder repeats the objection in far more emphatic language 'On conçoit qu'il n'est pas de condition moins favorable, ni de plus contradictoire au départ.' And he proceeds to explain the whole series as representing athletes preparing to jump!

I confess I utterly fail to see the force of the objection. A visit to a modern race meeting, or reference to pictures representing a start, such as the one shown in the Badminton volume on Athletics, would surely convince Dr. Hauser and M. A. de Ridder that both knees are always more or less bent at the start: when the feet are only a few inches apart, there can be but little difference in the bend of the knees, and in those vases where the heel of the hind foot is raised off the ground there is a corresponding difference in the bend of the knees. It is true that the difference is often more marked in a modern runner, but then the feet are much farther apart. Whereas, with the position of the feet as determined by the starting lines, I cannot conceive any position of the knees as possible other than that which we are considering. It is precisely the bend of the knees which may be seen any day on the cricket or football field, the position of one standing ready, on the alert to field the ball, or tackle an opponent. Surely M. de Ridder would not have either or both knees straight!

Further the position of the body and the hands agrees with that of the feet and knees. Just as in modern times, the precise angle of inclination of the body is largely a matter of individual taste, and there is a natural tendency to balance the body by stretching one or both hands to the front. With a shield on the left arm, the right arm is naturally extended in front. In the unarmed race, if the body is much bent, the arm corresponding to the front leg must be well advanced, and the other arm kept back. If the body is nearly upright, both arms may be brought to the front. In any case the arms must be used to balance the body; but the position of the feet does not admit the free use of the arms which we used to see before the present method of starting off the hands was introduced. For we must never lose sight of the fact that we are not considering whether such and such a position is the best according to our modern ideas, but whether it is appropriate to the conditions of a Greek start, *i.e.*, with the feet close together. That the position of the Tübingen bronze is appropriate I have tried to show.

Again, if it does not represent a runner about to start, what does it

represent? M. A. de Ridder says a jumper preparing to jump. But a jump must be taken off both feet or off one. In the first case the feet must be absolutely parallel, in the second case the feet are well apart. Both positions are illustrated in the vases which Dr. Hauser has wrongly brought forward as parallels to his Hoplitodromos, and which M. de Ridder rightly interprets as depicting the jump. But the position with one foot a few inches behind the other is appropriate neither to a jump off both feet, nor to a jump off one foot.

M. de Ridder, however, brings forward a most curious argument to prove his view. There is nothing to show, he says, that the scenes depicted refer to the stadium at all, and not rather to the Palaestra. The pillars may mark the Palaestra as well as the stadium, the draped figure with the rod may be a Paidotribes just as well as a Brabeus or Agonothetes. This is quite true, but not so his next statement. 'Tout exercice en vue d'un jeu est nécessairement différent du jeu même.' M. de Ridder obligingly shows us the particular from which he has arrived at this extraordinary generalisation. Pausanias⁵³ describes the votive offering of Epicharimus as a Hoplitodromos 'practising for the armed race.' How did Pausanias know that he was practising instead of racing? Because the practice was necessarily different from the actual race. What then was the practice for the armed race? The characteristic of the Hoplitodromos, says M. de Ridder, was that he advanced by a series of leaps and bounds. What practice could be more useful for such a style than jumping? Therefore the Hoplitodromos was represented in the statue as jumping! This too is the meaning of the Tübingen bronze, and of all similar vase paintings!⁵⁴ M. A. de Ridder completes the 'reductio ad absurdum' of his own theory when he solemnly ascribes a similar method of practice to the Lampadedromos!

The description of the style of running is as I have shown appropriate to the Stadiodromos rather than to the Hoplitodromos; but the radical fallacy of the whole argument lies in the words I have quoted. The principal training for any athletic event does *not* differ in kind from the event itself. However useful other exercises may be for producing fitness, the diskos thrower must practise the diskos, the jumper jumping, the sculler sculling, the cricketer cricket. No amount of physical training will make up for this special training. So it is with running. The runner may keep himself in training by other forms of exercise, but the most important part of his training is on the running path. It is true he does not in practice habitually run the same distance as in the actual race. But the style of running is the same in practice as in the race, and if he is a sprinter he must especially practise starting. The Greek must have practised not only starting but turning, and this practice must have taken place as far as possible under the same conditions as in the actual race. Accordingly we find

⁵³ I. 23. 9.

⁵⁴ So Reinach describes the Hoplite on an amphora mentioned above as 'Athlète armé en

hoplite, sur le point de sauter en présence d'un arbitre des jeux.' *Répertoire des Vases peints*, i. 494.

at Olympia remains of starting lines in the gymnasium precisely similar to those in the stadium. Therefore in studying athletic scenes on the vases it makes no difference whether the painting represents the practice or the competition, the gymnasium or the stadium. The start and the turn must have been the same in practice as in competition. These being the most important parts of practice it would be strange indeed if we did not find them represented among the hundreds of vases which picture Greek athletics. But if the vases which I have described and the Tübingen bronze do not represent the start, where is it represented? The argument from omission becomes still stronger when we remember that the Greek artist does not as a rule depict moments of violent action but prefers moments which mark the beginning or conclusion of action. In the diskos, the spear, the jump, in wrestling, and in boxing we have numerous representations of the preparations for each event, and of the moment before: it would be extraordinary therefore if in running alone this moment were omitted.

C.—Vases representing the Turn in the Diaulos.

Assuming that we have recognised the position of the start, let us try to interpret the Berlin kylix (Fig. 6), which I have mentioned, setting beside it two other vases, a kylix formerly at Berlin, of which a drawing is preserved in that Museum (Mappe xxi Taf. 82), and a kylix of Euphronius figured by Hartwig, *Meisterschalen*, Pl. xvi. In all three the runners run in opposite directions and it is therefore agreed that they represent a diaulos, and the turn in the diaulos. In all three the principal movement is from right to left, and the turn is made to the left. In two of the three an official is standing by with his forked rod ready to see fair play. In all three the turn is represented by the pair of runners to the left. It is on this point that I join issue with Dr. Hauser and M. de Ridder, who both maintain that in the Berlin kylix the two runners to the right represent the turn. For convenience I will keep the numbers which Dr. Hauser has given to these three figures. Dr. Hauser's theory absolutely ignores the attitude of the runner on the extreme left (No. 4), who is leaning forward with his right leg bent, while his head and body and right arm are all turned to the left. According to Dr. Hauser he has already turned and is well on his way back. If so, why is his body turned to the left? He cannot be merely looking back, a position which is represented on the other side of this very kylix, for his whole body is turned and the right arm swung across the body; an action which certainly justifies Dr. Hauser in saying that No. 5 will soon pick him up.

The only possible explanation of this remarkable attitude is that the runner is in the act of turning. He has checked his speed as he nears the post, and then in order to turn with the least possible loss of ground he advances his right foot just in front of the post and throws his weight forward, at the same time turning his whole body to the left. The next moment he will bring up his left foot to a level with the right and turning

on the left foot start back again with short steps, and throwing his body forward, the right arm still to the front steadying the shield. This is the attitude of No. 6, who cannot possibly be checking his pace before the turn as Dr. Hauser suggests. This explanation leaves us free to class No. 5 with the figures whom we have already recognised as starters. The position of the feet could not possibly occur after the start they are far too close

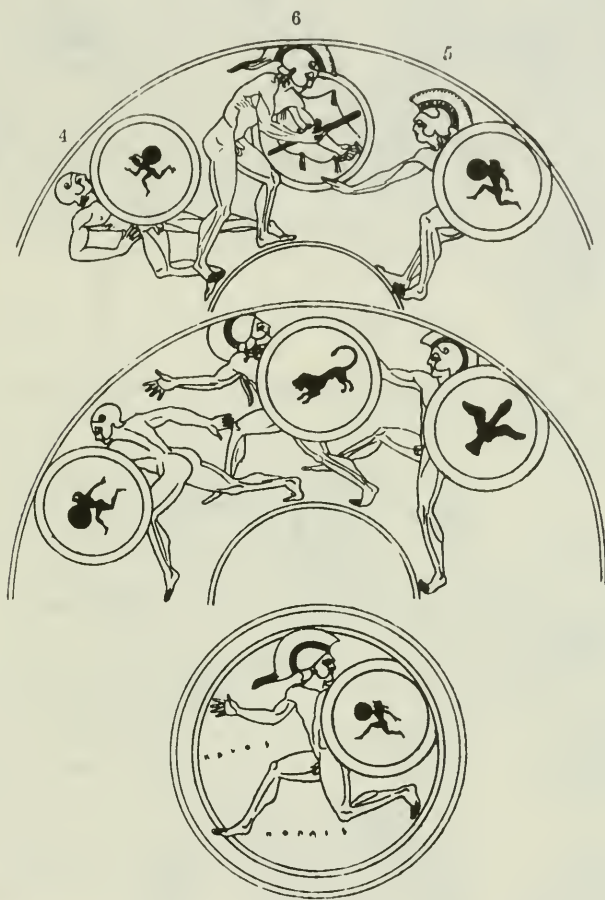


FIG. 6.—R. F. KYLIX, BERLIN.

together to represent even the short steps of a runner starting again after the turn. This explanation of the three figures is confirmed when we compare the group to the left with the similar group on the Euphronius kylix (Fig. 7). Here the relative positions of the two runners show that the figure turning round with an anxious look towards the official has not quite reached the turning point, though the position of the body and the shortened stride indicate that he is already thinking of the turn. The figure to the left who

has already turned is in exactly the same attitude as No. 6 on the Berlin kylix. The drawing of our third vase preserved in the Berlin Museum (Fig. 8) shows



FIG. 7.—R. F. EUPHRONIUS KYLIX, PARIS. (After Hartwig.)



FIG. 8.—R. F. KYLIX, FORMERLY IN BERLIN.

the turn still more clearly both in the interior and on the exterior. In both cases we see a runner checking himself before the turn by throwing the

body back, and stretching his right arm to the front. This action is more strongly marked in the figure on the exterior, but in opposition to Dr. Hauser I believe that the moment represented on the exterior is earlier than that shown on the interior. The difference is of little importance, but the more violent check seems likely to precede the less violent attitude where the runner is recovering his balance and is shortening his step. The second figure in each case shows the actual turn, but again the turn is a trifle more advanced on the interior than on the exterior. I have endeavoured to arrange the positions shown on these vases so as to give a complete picture of the turn (Fig. 9). It is remarkable how accurately they follow one another. Six stages are marked:

1. The body is thrown violently back to check the pace.⁵⁵

2. A shorter step follows, the body still thrown back but not so violently.

3. The right leg is advanced level with the turning point, the body being thrown forward and at the same time turned to the left.

4. The left leg is brought up level with or slightly in front of the right, the body being thereby brought to the upright and continuing to turn.

5. The turn is completed on the left leg, the right hand grasping the edge of the shield to steady it.

6. Throwing the body forward the runner starts on the return journey with short steps.

Of course I do not wish to assert that these positions always followed one another in this order, but the mere fact that it is possible so to arrange them, shows the accuracy with which the vase painters observed the various positions at the turn.

It remains to consider the other figures on our vases.

In the Berlin kylix we have seen that both the start and the turn are represented. On the other side three men are running at full speed to the left. In the interior a single figure runs at full speed to the left looking backwards as if with an air of triumph. Does he represent the victor? The same



FIG. 9.—RECONSTRUCTION OF THE ARMED RACE, SHOWING THE POSITION OF STARTING ON THE RIGHT AND THE TURN ON THE LEFT.

⁵⁵ Cf. B.M. E. 78 (Fig. 13 below).

type occurs in the centre of a B.M. kylix E 22,⁵⁶ and another kylix E. 21 shows an unarmed runner wreathed in the very same position. Such single figures might well represent the victor, and, if so, our kylix depicts every phase of the race from start to finish.⁵⁷

Coming to the Euphronius kylix we find a group of three figures to the right of the Brabeus. The left hand figure of the three may belong to the group on the left, in which case his position is probably the same as No. 1 or 2 in our series. But symmetry seems to suggest that he belongs to the right hand group. The central of the three figures is putting on his greaves, a performance which according to Heliodorus⁵⁸ did take place at the start, while the other two figures are perhaps engaged in a preliminary canter, such as is described by Statius,⁵⁹ in which case the runner with uplifted hand and body bent back is perhaps stopping before turning back. Perhaps this may be the explanation of the right hand group on the lost Berlin kylix, though the context suggests that it really represents the actual race, and that the figure to the left has accidentally dropt his shield. The other runner has evidently just started, his short step and the forward inclination of the body reminding one of the runners who have turned on the Berlin kylix (No. 6), and on the Euphronius kylix.

D.—*The Character of the Armed Race.*

These three vases suggest certain points about the armed race. In the first place the turn appears to be made *round* some point. There is no indication of touching any object, and turning back, or of toeing a line. Moreover the post round which they turned must have been fairly high, otherwise the body would not be thrown forward, as it is, so as to clear the post. Therefore if the runners each ran in his own track, they must have turned round the post to the left, and returned by the other side. But secondly the attitude of the runners halting, with their right hands outstretched, and the way in which they look back at their fellows seem to indicate that they are not running in parallel tracks but all together round some common turning-point. As I pointed out, even if the runners in the diaulos ran each round his own goal, it does not follow that the armed runners did the same. The weight and encumbrance of their armour would make the race much slower, and so increase the distances between the runners and lessen any unfairness that might be caused by the start. At the same time there would be considerable danger of fouling (*κακότεχνία*) at the turn, and strict regulations would be necessary to check it. The hoplites who are stopping so suddenly on the lost Berlin kylix seem to be anxious to avoid fouling those in front of them, and thereby disqualifying themselves. Lastly, the less elaborate arrangements, would I believe, be in complete accord with the character of the armed race, a point on which I must say a few words.

⁵⁶ Murray, *Greek vases in B.M.* 18.

Cf. Jüthner *Antike Turngeräthe*, p. 67.

⁵⁷ Similarly a Duris kylix in the B.M. E.
⁵³ shows all the successive stages in boxing.

⁵⁸ *Acth.* iv. 3 f.

⁵⁹ *Theb.* iv. 587.

The armed race belongs to what we may call mixed athletics, that is to say competitions conducted under fancy conditions, such as obstacle races, races in uniform, swimming races in clothes and all the many events which make up a modern Gymkhana meeting. Such events are popular in character: they are not intended for the specially trained athlete any more than a point to point steeplechase is intended for the race horse or the cart horse. Signs are not wanting that the armed race belonged to this class. The entries were apparently large. Twenty-five shields were kept at Olympia for use in the race, though the starting lines only provided separate places for twenty runners. In such races the more competitors the better. Again the armed race was the last event on the programme at Olympia, and elsewhere, and the last event is often of a less serious character than those that have gone before. In modern sports we often end with a sack race, or an obstacle race, and we find the same motive on the Greek stage, where the tragic trilogy was followed by a satyric drama by way of relief. If we had the complete list of the prizes at the Panathenaic games I believe we should find that the Hoplitodromos did not receive so many amphorae as winners in the other events. Unfortunately the inscription⁶⁰ is here wanting, but some confirmation of my point is provided by the parallel of the chariot race. The winner of the chariot race proper received 140 amphorae, the second 40 amphorae. In the race for war-chariots the winner received 30 amphorae, and the second 6 only. If such a distinction was made between the race horse and the war horse, it is not unlikely that a similar difference existed in the foot races. In assigning this popular character to the armed race, I do not wish in any way to under-rate it, nor is such a view at variance with the importance which Plato attached to it on utilitarian grounds. Plato himself condemns the training of the professional athlete, the object of athletics being according to him not to train athletes, but useful soldiers and citizens; and for this very reason he insists on running in armour. Just so with us, the professional runner would despise the obstacle race, as not serious athletics. But the practice of the obstacle race is an important part of the physical training of our soldiers, for the man who can win such a race is more useful in war than the champion sprinter.

Again there is always something incongruous and comic in the sight of a person running fast in inappropriate costume, a gentleman in a top hat and frock coat with an umbrella in his hand, or a soldier in full uniform with his rifle. There must have been something comic in a race of Greek hoplites with shields and high crested helmets, and this comic side is surely alluded to by Aristophanes when as he passes the chorus of birds in review he makes Peisthetaerus exclaim (*Aves* 291).

ἀλλὰ μεντοι τίς ποθ' ἡ λόφωσις ἡ τῶν ὀρνέων;
ἢ 'πὶ τὸν δίαυλον ἦλθον;

⁶⁰ *C. I. A.* ii. 2. 968.

Comic incidents must sometimes have occurred, such as the dropping of a shield, an accident which may be depicted on the lost Berlin kylix as I have suggested.

Perhaps this view may help us to explain various vase paintings collected by Dr. Hauser which show runners without their shields, holding their helmets in their hands, putting down or taking up their shields. Dr. Hauser tries to show on this evidence that the armed race was a double diaulos, that the runners on reaching the turning point put down their shields, and ran without them, but took them up again when they reached it the second time. That this was the practice at the greater festivals, there is no proof, and in the absence of direct evidence we must assume that it was not so. At the same time these scenes may well refer to certain forms of running practised in the Gymnasia, or to certain races held at the less important local meetings. Such popular sports naturally lend themselves to variations. The Greeks were fond of acrobatic and gymnastic tricks, and spending as they did so much of their time in athletics we may be sure that they varied the seriousness of pure athletics with lighter competitions of the Gymkhana type.

We have direct evidence that there were such variations in the armed race. Philostratus expressly states *οἱ δρόμοι οἱ ὀπλίται ποικίλοι καὶ μάλιστα οἱ κατὰ Νεμέαν, οὓς ἐνόπλους τε καὶ ἱππίους ὀνομάζουσιν*.⁶¹ After discussing the traditional origin of the armed race at Olympia, he adds that the best of all the armed races was that at Plataea, first on account of its length, secondly on account of the heavy armour used, which was the same as that in actual warfare, thirdly because of its strict regulations, by which anyone who had once won the race, if he entered a second time, was liable to the penalty of death if defeated. From this passage we see that the variety in the race consisted partly in distance, partly in equipment. The ordinary distance appears to have been a diaulos. The term *ἱππιος* may denote a double diaulos: the race at Plataea was evidently of unusual length. Plato in the Laws suggests an armed race of excessive length, 60 stades for the heavy-armed hoplite, and 100 stades across country for the light-armed bowmen. Here we see that Plato suggests different styles of armament. Philostratus describes the equipment used at Plataea as *ποδήρη καὶ σκεπάζουσιν τὸν ἀθλητήν*. Vases show us that the use of greaves was gradually discontinued. In the earliest vases the usage varies. After 520 B.C. the use of greaves is general. After 450 B.C. it disappears entirely.⁶²

But the epithet *ποικίλος* implies more than mere difference in distance or equipment, it implies distinctly the fanciful element of the Gymkhana, and I venture to put forward this idea as a possible explanation of a number of Hoplitodromos vases, otherwise unexplained. It is of course impossible to obtain any certainty as to the details; it will be sufficient if we can thus give a general explanation of certain of these scenes.

⁶¹ *Gymn.* 7.

⁶² Hauser, *Jahrb.* 1895, p. 199.

Let me first take the skyphos from the Bourguignon collection which I have already referred to, on which Dr. Hauser thought he saw a trace of the ὕσπηλιξ. We see a hoplite with a shield on his left arm, stretching forward and supporting himself on his right arm, his feet being close to a

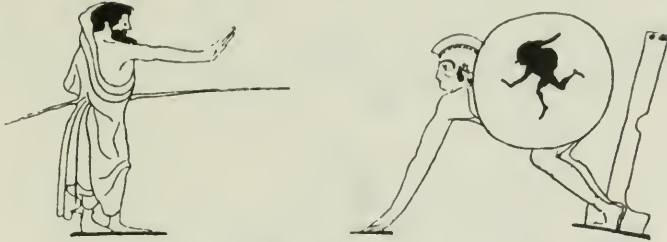


FIG. 10.—BOURGUIGNON SKYPHOS. (After Hauser.)

pillar. On the other side of the vase, but probably connected with the same scene, is a bearded official wearing a himation and carrying a long rod, with his right arm outstretched in a gesture of command. Dr. Hauser describes this hoplite's position as a 'wahres Kunststück von Balance,' and suggests that it represents the position of starting, the object of so unnatural a position being to prevent any competitor from poaching at the start. M. de Ridder rightly sees the absurdity of supposing that the Greeks started in so impossible a position, and he finds in it merely a gymnastic exercise of 'assouplissement,' and compares it with the lost Naples vase already mentioned⁶³ which undoubtedly represents a start. The position is a familiar one in 'gymnastic drill at the present day, known as 'the front leaning rest on the right arm', and is certainly not such a marvel of balance as Dr. Hauser supposes. But I have been unable to find any vase painting of which we can be certain that it represents any form of gymnastic drill. I doubt whether the Greeks of this period practised 'exercices d'assouplissement.' Physical drill is for those who lead a sedentary life in cities, not for those who lead an active life in the open air like the Greeks. Dr. Hauser's explanation seems nearer to the truth. For though it is impossible to regard this position with him, as a recognised position for the start in serious athletics, such a fanciful position may well have occurred in a race of the less serious type at less important meetings, or in the matches that must have been constantly arranged among the youths in the various Palaestrae. For example in the present day the runners in an obstacle race are sometimes made to lie down for the start.

Another vase where the fanciful element is yet more obvious is a Munich kylix (Fig. 11, Jahn 803). The sponges and implements hanging on the wall show us that the scene belongs to the Palaestra. There are five figures. Two fully armed Hoplites run to the left, carrying their shields in both

⁶³ Fig. 2, p. 271.

hands in front of them, certainly a most difficult position for running. The figure to the left is leaning back, in a position similar to that which we have already seen, apparently to check his pace. Three other athletes run to the right. The runner in the centre is entirely unarmed; perhaps he is merely a *Stadiodromos* practising and has nothing to do with the other four. The other two have helmets but no shields. The different directions of the runners clearly indicate some form of the *diaulos*. The whole group seems to suggest a race where the runners on reaching the turn put down their shields and return without them. Perhaps the unarmed runner repre-



FIG. 11.—R. F. KYLIX, MUNICH.

sents a second lap where they further divest themselves of their helmet. But it is useless to go into details. We can merely recognise in this scene one of the varieties of the armed race of which Philostratus speaks. The motive of putting down or taking up the shield—it is hard to be certain which it is—is shown on three other vases mentioned by Dr. Hauser, a kylix of Hischylos, (Klein, *Meistersign.* 98.7), a kylix in the Museo Torlonia at Rome, and a Munich kylix (Jahn 1240). A Lykos kylix published by Hartwig (Pl. xii), which shows us a runner striding over a shield which lies on the ground, may possibly belong to this group.

E.—*The Finish of the Armed Race.*

There are a number of vases where the runner holds his helmet in his right hand. Dr. Hauser classes this type with the vases I have just discussed, and if he is correct, they afford most valuable confirmation of the theory which I have put forward. This motive occurs, however, too frequently, I fear, to be connected with any particular variety of the hoplite race, or, as M. de Ridder holds, to represent merely a practice for the race; and it is therefore better if possible to connect it with the regular type of hoplite race. It occurs on the following vases:

1. B.M. E 818. R.F. kylix (Fig. 12).

To the right is a fluted pillar, against which lies a shield, apparently belonging to a runner who is just passing the pillar. He lifts his right hand towards his head, a movement which we have already found on the Euphronius kylix and the lost Berlin kylix, and which occurs on the Lykos



FIG. 12.—R. F. KYLIX IN B.M.

kylix mentioned above. Further to the left another runner looks back on him with a look of triumph holding his helmet in his right hand. The position of the head occurs in the centre of the Berlin kylix, where we suggested that possibly the victor was depicted. Further to the left is an official resting on a staff and holding a forked rod.

2. Pelike. Vienna. (*Arch. Anz.* 1892, pp. 172 and 198).

To the right a pillar. Beyond it a runner holding his helmet in his right hand, and shield on left arm, strides to the left towards an official with the usual forked rod. On the ground lies a shield with a helmet on the top.

3. B.M. E 78. R.F. kylix (Fig. 13).

A Palaestra scene, in which the only figure who concerns us is a

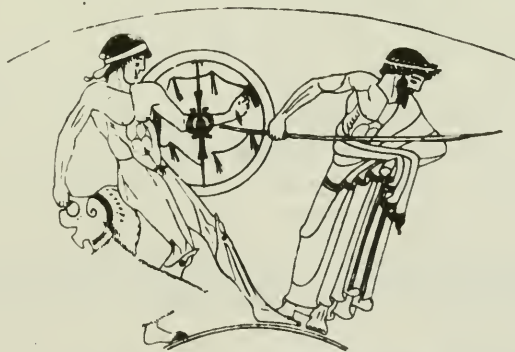


FIG. 13.—R. F. KYLIX IN B.M.

Hoplitodromos to the right. He is leaning backward in the attitude of the runners stopping before the turn on the lost Berlin kylix. His right knee is bent, his left leg straight, and he holds his helmet in his right-hand behind the body. The attitude is frequent with jumpers and diskoboloi, and is the natural attitude of a runner who suddenly stops, not, as stated in the catalogue, of a runner about to start.

4. Kylix. *Mus. Gregor.* lxxi. 46.

A Hoplitodromos with helmet in right hand behind the body approaches a pillar.

5. Amphora. Palermo, 2120 (*Jahrb.* 1895, p. 198).

A Hoplitodromos moving to the right looks back at an official of the usual type and holds his helmet in his right hand level with his head.

6. Amphora. Naples, Heydemann, 3083.

Almost identical with No. 5.

7. Kylix. Berlin, 4039, *Coll. Sabouroff* I 53.

A runner in a somewhat stooping attitude runs to the right apparently about to put down his shield, the rim of which seems to touch his left foot. He holds his helmet in right hand behind the body.

8. Fitzwilliam Museum, Cambridge, R.F. kylix, Hartwig, *Meisterschulen*, Fig. 14, not mentioned by Hauser (Fig. 14).



FIG. 14.—R. F. KYLIX, CAMBRIDGE.

A runner in a somewhat stooping attitude, his shield held low on left arm, helmet in right hand in front of body. On his head he wears a wreath.

To these we may perhaps add

9. An amphora from the Bourguignon collection. (*Jahrb.* 1895, p. 199, Fig. 34).

The runner moves towards an official who makes a gesture as if to stop him. He lifts his right hand to his helmet as if about to take it off.

This same gesture occurs on

10. Lykos Kylix (Hartwig. pl. lxii. 1).

The runner's shield lies on the ground, and his right hand almost touches his helmet. The whole attitude is almost identical with that of the right hand runner in No. 1. In both cases it seems as if he has thrown his shield down and is about to take off his helmet; in this kylix he is evidently checking his pace. In the field are a strigil and aryballos.

If these scenes do not belong to some variety of the hoplite race, or to practice merely, but to the regular race, what do they represent? The solution is to be found, I think, in the first of the series. In this vase as in Nos. 2, 4, we find a pillar. This pillar must represent one end of the course, either the start, or the turn, or the finish. We have seen similar pillars at the start, and at the turn, and we have recognised certain positions as belonging either to the start, or to the turn, to which these do not correspond. The inference is that here we have the finish of the race, or the moment just after the finish, and further examination confirms this view. In no case are the runners going at full pace, in most cases they are clearly checking their pace, in No. 3 the check is most marked. In Nos. 1, 2, 5, 6, 9, we see an official, probably the Brabeus with his forked rod, whom we have also seen at the start and at the turn. In Nos. 1, 2, the runner has just passed the post, in No. 4 he is just reaching it. In No. 1 we see two runners, the first, as Mr. Cecil Smith says, wins easily, the second seems not to have dropt his shield but thrown it down, perhaps in disgust. In No. 2 a second runner, perhaps the winner, is suggested by the shield and helmet on the ground. In neither of these vases is the attitude appropriate either to the start or to the turn, while all the details point to the finish. Finally what could be more natural than at the close of a 400 yards race in armour under a scorching sun to take off the cumbrous, heavy helmet! Perhaps too it may have been a point of etiquette for the winner to do so, just as a cricketer returning to the pavilion after a fine innings takes off his cap. And so the attitude may be symbolical of victory, and the single figures which we see in Nos. 7 and 8 may represent the victor, and the wreath around the hoplite's head may be the wreath of victory. To determine the motive of a single figure is difficult, but surely nothing could be more natural than to represent a runner as a victor, by introducing some gesture typical of victory, either the helmet in the right hand, or the back-turned head, as I suggested in the centre figure of the Berlin kylix, or both as in the first vase of this series. The Lykos kylix presents greater difficulties. Has he dropped his shield, as in the lost Berlin kylix, or is he defeated as in the vase just mentioned, or does he belong to the previous

group of runners who put down their shields at the turn? The attitude must have been a familiar one in the palaestra, and perhaps the strigil and aryballos in the field indicate that this is merely a palaestra scene.

F.—*Arming for the Race, and other scenes.*

If my explanation of this group is correct, our series is now complete. We have seen the start, the actual race, the turn: now we have the finish. To these we may add vases which show athletes arming before the race. This scene occurs on the Euphronius kylix already described, and also on a kylix in the British Museum (E 22). The youth in the centre is bending down to

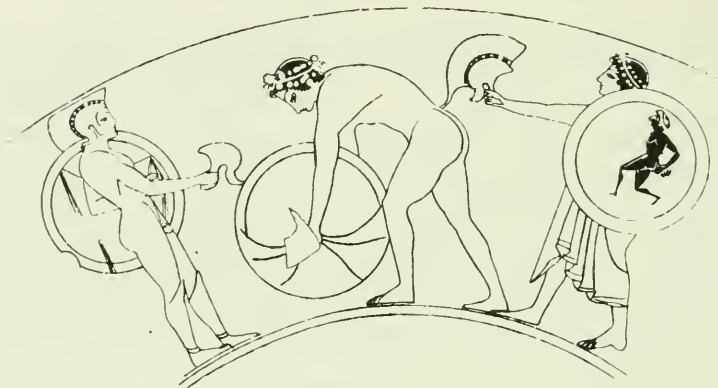


FIG. 15.—R. F. KYLIX IN B.M. E. 22.

take his shield from its *σάγμα*. On the other side we see four hoplites running in very precise and regular order and holding spears in their right hand as if about to throw them. It has been suggested that they represent a variety of the armed race in which the runners carried spears, and a similar explanation has been given of a vase figured by Gerhard (*A.V.* 258. 4). This seems hardly probable. Apart from the danger of running with spears, especially in a race involving a turn, the regularity of the runners is much more appropriate to some purely military exercise, such as a charge, and this view is confirmed when we compare them with Gerhard *A.V.* 258. 1, which can only represent a charge. There is moreover no literary evidence for such a race. The combination of a purely military exercise with preparations for the armed race suggests that the latter, as we might have expected, formed a regular part of the hoplite's training.

Since the above was written another most interesting kylix belonging to Sir Frederick Cook has been exhibited at the recent exhibition of the Burlington Fine Arts Club (Pt. III. 17). I much regret that I am unable to reproduce it; it is to be hoped that it will soon be published. The interior represents a robed official, standing between a low seat and a fluted pillar, the exterior two

groups of Hoplitodromoi. On the one side are two youths running to the left, holding their helmets in their right hands in front of them. They are checking their pace, with the right leg advanced and straight and the body leaning back. Between them is a robed official holding a forked staff. To the right is a skapane. On the other side, we see a fluted pillar to the right, and another runner in the same position as the first pair running to the left. Beyond him is another official as on the other side, looking towards an unarmed youth who stands with both hands extended to the front, the right foot a few inches in front of the left, and the knees slightly bent. His position is identical with that of the runner figured by Hartwig (fig. 6) which I have already described in connection with the start. On the ground beside him lies his shield with his helmet upon it.

This interesting vase has many analogies with those already described, but has also some special difficulties. The skapane apparently indicates that the scene is in the Palaestra. As in the Munich kylix one of the runners has taken off his shield and helmet. He is apparently practising starts unarmed. The other three all hold their helmets in their hands. The one by the pillar might well represent the finish, as in the vases already discussed, but what of the other two? Perhaps they are practising without their helmets for comfort, or perhaps the artist has taken a typical position in the race which pleased him, and repeated it for the sake of symmetry. Such symmetrical arrangements are very common in athletic vases, and this vase is essentially symmetrical. We must not forget that the vase-painter's object is not to illustrate a treatise on Greek sports but to produce a pleasing picture, and that considerations of space and composition are more important for him than the literal representation of actual arrangements. Hence vases, invaluable as they are for the style and positions of Greek athletes, are not always safe guides for the actual arrangements of the sports.

In the preceding discussion I am conscious how much I have left vague and uncertain. Vases often suggest rather than prove, and it seems safer to try to interpret their suggestions generally rather than to explain dogmatically every detail without sufficient evidence. It will be sufficient if I have shown the various movements of the armed race represented on the vases and certain general characteristics of the race.

G.—*The lighter side of the Greek Athletics.*

In the view which I have taken of the character of the armed race I have assumed that the comic element would enter into Greek sports; we may go further, there were certain races which were essentially comic, such as the Lampadedromia, and the Oschophoria. The Lampadedromia was of course a religious or festival race, originally connected with the worship of the fire-god. But the history of Greek comedy sufficiently proves that the comic element was not excluded from Greek religion, and Aristophanes is our witness to the comic character of the torch race. It is a pastime essentially

for the young, and Bdelycleon mentions it together with hunting the hare and the boar (*Vesp.* 1203) as types of the youthful exploits of which his father should boast

ἀλλ' ὥς ἡ κάπρον
ἐδιώκαθές ποτ' ἡ λαγών, ἡ λαμπάδα
ἔδραμες, ἀνευρών ὅ τι νεανικώτατον.

The stooping attitude adopted by the runners in their efforts to keep the torch alight was proverbial.

ἀν γὰρ τὰν πόλιν
ἄπερ λυχοφορίοντες ἐπικεκύφαμες

says the herald describing the sorry plight of the men in the *Lysistrata* (1002); and again in the *Frogs* Aeschylus says of the degenerate youth of the day (*Ran.* 1087)

λαμπάδα δ' οὐδεὶς οἶός τε φέρειν
ὑπ' ἀγυμνασίας ἔτι νυνί.

And Dionysus tells how he nearly died of laughter at the slow clumsy efforts of some fat, white-fleshed youth toiling along in the rear, bent double (*κύψας*), while the potters at the gates speed him on his way with slaps on various portions of his person.

It is just this stooping attitude which is depicted on a small kylix published by Dr. Hauser. The drawing is poor and much broken, but it shows us clearly a torch runner standing near a pillar, his feet close together, his knees much bent, stooping forward with the torch in his left hand, a picture of comical anxiety, such as is familiar to all who have seen an egg and spoon race. Is he standing ready to start, as Dr. Hauser says? It seems very likely. In a drawing so much damaged, we cannot say what the pillar represents, it may represent an altar, or it may represent the pillar at the start of the race. But whether our torch runner is about to start, or not, and personally I am inclined to think he is, his attitude has no connection whatsoever with that of the starter in the armed race, or in the stadium. And yet it is the evidence of this figure which convinces Dr. Hauser that the Tübingen bronze represents the start, and not, as he first said, the restart after the turn. For the torch race, he says, was no *diaulos*, and there was no turn. But if Dr. Hauser treats this vase too seriously, M. de Ridder is far more to blame, for he calls attention himself to the passage in the *Frogs* to which I have referred. He interprets both vase-painter and poet with the same want of humour. We are not dealing, he says, with a real race, because the torch race started from an altar, and in the vase we see a pillar. The pillar, he says, denotes the palaestra where the torch runners practised, and then he quotes the above lines of Aristophanes to show how severe must have been the training for the torch race. How then, he asks, did the torch runner practise? Surely by jumping, which must have been as efficacious for the torch runner as for the *Hoplitodromos*. And so the explanation of the vase painting is obvious, the torch runner is practising jumping. This is a

fair statement of M. de Ridder's argument, set forth on pages 231 and 232 of the *Bulletin* for 1897. One can only regret that a writer of such learning should have given his authority to a theory, the fallacies of which must be obvious to anyone who has any practical knowledge of athletics, or who can enter at all into the spirit of Aristophanes.

Another race, where the festal element was yet more strongly marked, was the *Oschophoria* connected with the worship of Dionysus. Certain youths dressed in women's clothes ran bearing branches of grapes from the temple of Dionysus to that of Athena Skiras, the winner receiving as his prize a drink made of wine, honey, cheese, flour, and oil. A somewhat similar ceremony called *Staphyledromia* took place at the Spartan *Karneia*.

This lighter side of Greek sports might be further illustrated from the vase paintings, especially from those which represent the sports of boys. To take a single example, we often see boys with hoops; sometimes they are being crowned; on a Vienna krater⁶⁴ we see a youth with a hoop receiving a prize. These vases clearly suggest some form of hoop race. Caricatures of athletic subjects are not infrequent. A kylix exhibited at the Burlington Fine Arts Club⁶⁵ shows an excellent caricature of the chariot race. Other vases depict a variety of acrobatic performances. Such scenes help to remind us how fragmentary is our knowledge of Greek sports and games, and teach us that if athletics were a serious business with the Greeks they had also a lighter side which must not be forgotten. Greek life was full of humour, and without a sense of humour it cannot be understood.

In conclusion I must express my indebtedness to Dr. Hauser for kindly allowing me to reproduce several of the vase paintings which he has published. If I have ventured to differ from him in certain details, I freely acknowledge that his careful researches have laid the foundation of our knowledge of the armed race. My thanks are also due to Mr. A. S. Murray for permission to reproduce certain vases from the British Museum, and also to Mr. H. B. Walters of the British Museum for the constant assistance and advice which I have received from him.

E. NORMAN GARDINER.

⁶⁴ *A.Z.* 1877, Pl. xiv.

⁶⁵ Part III. 75.

MYSTICA VANNUS IACCHI.

‘Tis thou, alone, who with thy Mistick Fan,
Work'st more than Wisdom, Art, or Nature can
To raise the sacred madness.’

HERRICK.

VIRGIL in the first Georgic, at an early stage of his enquiry into the service of Ceres, enumerates first various heavy agricultural implements, the ‘ponderous strength of the plough-share,’ the ‘slow-rolling waggons of the Eleusinian Mother,’ ‘hurdles’ and ‘harrows,’ and the ‘grievous weight of the mattock.’ Next he passes on to tell of the husbandman’s lighter gear.

Virgea praeterea Celei vilisque supellex,
Arbuteae crates, et mystica vannus Iacchi.¹

The object of the following paper is to discuss three questions that arise out of Virgil’s statement.

1. The exact nature of the ‘fan,’ its shape and use.²
2. The precise sense in which the ‘fan’ is called ‘mystic.’
3. Classed as it is among the instruments of Ceres, how and why did the ‘fan’ pass into the service of Iacchus?

Virgil takes the fan, its mysticism and its connection with Iacchus as known; but, happily, by the time when Servius wrote his commentary (fourth century A.D.), the fan, and still more its mysticism, had become matter

¹ Virg. *Georg.* i. 165. Serv. ad loc.: Id est cribrum areale. *Mystica* autem *Iacchi* ideo ait quod Liberi patris sacra ad purgationem animae pertinebant: et sic homines ejus Mysteriis purgabantur, sicut vannis frumenta purgantur. Hinc est quod dicitur Osiridis membra a Typhone dilaniata Isis cribro superposuisse: nam idem est Liber Pater in cujus Mysteriis *vannus* est: quia ut diximus animas purgat. Unde et Liber ab eo quod liberet dictus, quem Orpheus a gigantibus dicit esse disceptum. Nonnulli Liberum Patrem apud Graecos *Λικνίτην* dici adferunt; *vannus* autem apud eos *λίκνον* nuncupatur; ubi deinde positus esse dicitur postquam est utero matris editus. Alii mysticam sic accipiunt ut vannum vas vimineum latum dicant, in quod ipsi propter

capacitatem congerere rustici primitias frugum soleant et Libero et Liberæ sacrum facere. Inde *mystica*.

² The ‘fan’ has been discussed by Blümmner, *Technologie*, p. 8, and the processes of winnowing by Schrader, *Real-lexicon*, s.v. ‘Worfeln.’ To both of these authorities I owe many references, but neither appears to be aware that a ‘fan’ of substantially the same shape as that in use in classical days is in use to-day, nor do they accurately describe the method of its use. I should like to say at the out-set that what is new in my discussion so far as it relates to the shape and use of the ‘fan,’ is entirely due to the kindness of Mr. Francis Darwin, to whom this paper owes its inception.

for antiquarian enquiry. His note, though somewhat confused, is the *locus classicus* on the fan and must be given in full at the outset.

'The mystic fan of Iacchus, that is the sieve of the threshing-floor. He calls it the mystic fan of Iacchus, because the rites of Father Liber had reference to the purification of the soul, and men are purified in his mysteries as grain is purified by fans. It is because of this that Isis is said to have placed the limbs of Osiris, when they had been torn to pieces by Typhon, on a sieve, for Father Liber is the same person, he in whose mysteries the fan plays a part, because, as we said, it purifies souls. Whence also he is called Liber, because he *liberates*, and it is he who Orpheus said was torn asunder by the Giants. Some add that Father Liber was called by the Greeks *Liknites*. Moreover the fan is called by them *liknon*, in which he is currently said to be placed after he was born from his mother's womb. Others explain its being called 'mystic' by saying that the fan is a large wicker vessel in which peasants, because it was of large size, used to heap their first-fruits and consecrate it to Liber and Libera. Hence it is called 'mystic'.'

Servius is mainly concerned to explain the mysticism of the 'fan.' This he does, after the fashion of his day, by noting all the current opinions (*ἔνδοξα*) that he happens to know and leaving the reader to sort them as best he may. All the portion of his commentary that relates to mysticism must stand over till our second enquiry is reached. For the present we have only to ask what Virgil and his commentator contribute to the solution of the initial problem.

1.—*The exact nature of the fan, its shape and use.*

From Virgil himself we learn only two things, (*a*) the 'fan' is an agricultural implement, (*b*) it is a *light* implement made of some wicker-work. The word itself 'fan' (*vannus*) of course implies that it was used for 'fan-ning,' i.e. in some way ventilating, exposing to, or causing wind. Our modern 'fan' is an instrument for causing wind,³ but as will later be seen (p. 311), the modern 'fan' is by no means coextensive in meaning with its earlier form 'van.'

Turning to Servius: he defines the 'fan' at the out-set as 'cribrum areale' the 'sieve of the threshing floor.' We shall find later that this is true, but by no means the whole truth; a sieve might be used as a 'fan' but every 'fan' was not necessarily a sieve. The function that sieve and 'fan' have in common is that they are both implements employed in the purifying of grain by winnowing. At the end of his commentary Servius impartially states another current opinion somewhat incompatible with the

³ The connotation of our modern 'fan' has been the source of much confusion; even Mr. Andrew Lang (*Custom and Myth*, p. 36) is led by it to conjecture that the use of the *mystica vannus* was a 'mode of raising a sacred

wind' analogous to that employed by the whirls of the *taradun* or bull-roarer. The same confusion prompted the charming lines by Henick that stand at the head of this article. See also p. 312.

'sieve'-theory. According to this other view the fan is a large wicker vessel to contain first fruits. Finally (midway in his discussion) he states a fact all-important for our inquiry: the fan of the Latins is the same as the implement known among the Greeks as a *liknon* and this *liknon* gave to the Liber of the Greeks (i.e. to Dionysus) the title *Liknites*. Dionysus was called *Liknites*, 'He-of-the-liknon,' because on his birth he was placed in a *liknon*.

The substantial identity of *vannus* and *liknon* is of great importance. References in Latin authors to the *vannus* are few and scanty, whereas of the nature of the Greek *liknon* we have adequate evidence both in literature and art. Hence assuming for the moment that Servius is correct in identifying the two we shall best elucidate the *vannus* by examining the extant evidence as to the use and shape of the *liknon*.

(a) *The liknon was used as a cradle.*—This is definitely stated by Servius, and his statement is confirmed by earlier evidence both literary and monumental. The instance from literature may suffice. In the Homeric Hymn ⁴ to Hermes we read

ἔσσυμένος δ' ἄρα λίκνον ἐπώχετο κύδιμος Ἑρμῆς
σπάργανον ἄμφ' ὅμοις εἰλυμένος, ἥ τε τέκνον
νήπιον ἐν παλάμῃσι περ ἰγνύσι λαΐφος ἀθύρων
κεῖτο.

Ancient art shows us precisely what this *liknon*-cradle was like. The design in Fig. 1 is from a red-figured kylix ⁵ in the Museo Gregoriano of the

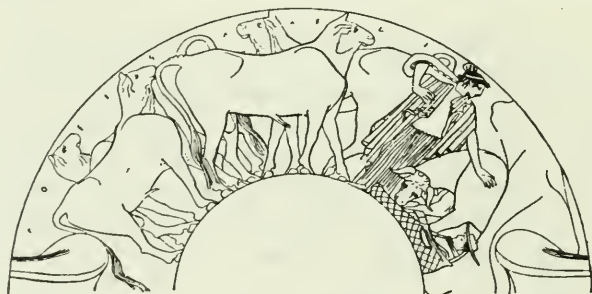


FIG. 1.—HERMES IN THE LIKNON.

Vatican. The child Hermes, wearing his characteristic broad petasos, sits up in his *liknon* and looks at the stolen cows. The *liknon*-cradle is a wicker-work, shoe-shaped basket with two handles. Whether it is closed at the end like a shoe or open like a shovel or scuttle cannot in this case be determined. A basket closed at the end would unquestionably make a more satisfactory cradle, as it would keep the child in.

The *liknon* as cradle appears on coins of imperial date.⁶ Two instances are

⁴ Hom. *Hymn. ad Merc.* 150.

⁵ Baumeister, *Abb.* 741, and *Mus. Greg. Etrusc.* ii. 83. 1^a.

⁶ For the coin of Nicaea see *Brit. Mus. Cat.*

Bitheynia, p. 153, Nicaea, No. 42, Pl. xxxii., 14. For the coin of Hadrian *Brit. Mus. Cat. Mysia*, p. 74, No. 10, Pl. xvii, 10.

given in Fig. 2. In the coin of Nicæa to the left the child Dionysus is seated in or rather on a *liknon*; he has both hands raised; behind him is his emblem the thyrsos. In the coin of Hadriani, to the right, the child in the *liknon* wears a petasos, and is therefore certainly Hermes. The shape of the



FIG. 2.

NICÆA.

HADRIANI.

liknon on the two coins varies considerably, but both are obviously made of wicker-work and both have the characteristic shovel-like outline, high at one end and low at the other, a shape essential as will later be seen to the primary function of a *liknon*, and convenient though not absolutely necessary for a cradle.



FIG. 3.—CHILD IN LIKNON. (Terracotta Plaque.)

No handles are visible on the *liknon* of the coins, though in designs of so small size they might, even if supposed to exist, be omitted. That handles were not an integral part of the *liknon* is clear from the design in Fig. 3

from a terracotta plaque in the British Museum.⁷ This representation, the subject of which will be discussed later, is of special value because it is one of the rare cases in which we get a front view of a liknon. The high curved back and the shallow open front are well shown.

An excellent instance of the liknon as a cradle is given in the design in Fig. 4, the right end of a sarcophagus now in the Fitzwilliam Museum at Cambridge.⁸ The liknon here is carried by its two handles, that to the left



FIG. 4.—CHILD IN LIKNON. (Pashley Sarcophagus.)

being clearly in view. It is made of closely plaited wicker-work; the weaving is obviously too close to allow of the liknon being used as a sieve. The mystical intent of the scene will be discussed at a later stage of the argument (p. 323), but one point must be noted: the liknon contains not only a child but fruit. On the original three round fruits, probably apples, are clearly to be made out; in the photograph reproduced in Fig. 4 they are obscured. This brings us to the second point.

(b) *The liknon is used as a basket for firstfruits.* Servius, it will be remembered, said that this was one of the uses of the *vannus*. Hesychius

⁷ No. 11. From a photograph. The design has been frequently published before, but always from slightly inaccurate drawings.

⁸ No. 31. See Michaelis, *Ancient Marbles in Great Britain*, p. 252. Fig. 4 is from a photograph. The sarcophagus was found at Arvi on the South coast of Crete by Pashley and figured by him, though inadequately, in his *Travels in Crete*, ii. pp. 18-19. The design in Fig. 4 occurs also at the end of the Farnese sarcophagus (Gerhard, *Antike Bildwerke*, Pl.

111. 3); it may have been from the Farnese sarcophagus, Prof. Colvin suggests, that Raphael borrowed his design. In the Kestner Museum at Hanover there is a majolica plate on which the design in Fig. 4 is substantially reproduced. The two men carry the child in the liknon, but in the background a little Renaissance landscape is added. This interesting plate will it is hoped be published by Dr. Hans Graeven, who kindly drew my attention to it.

defining *λεῖκνα* says 'baskets in which they place the grain, for that is what they call wheaten crops.' The *liknon* in use as a basket for fruits frequently appears in Hellenistic reliefs. The design in Fig. 5 is from a relief⁹ in the



FIG. 5.—LIKNON WITH FIRSTFRUITS. (Hellenistic Relief in Louvre.)

Louvre Museum. A *liknon* piled high with fruits is carried on the head of a small boy. An old man—whether priest or peasant is uncertain—holds it behind and helps to balance a weight that looks too heavy for the child to support. Between them they are about to place it on the altar near which a priestess expects them. Hiding in the tree stem to the right a rabbit waits till the holy rite is accomplished and his turn comes. The *liknon* in this case seems to be of wood, not basket-work, and it is elaborately shaped, but its form has all the essential points, i.e. the high raised back and low open front.

The *liknon* with firstfruits was not only brought to the altar, but also formally dedicated and set up in sanctuaries. This is clear from the design in Fig. 6, the upper portion of a Hellenistic relief in the Glyptothek at Munich.¹⁰ In the middle of a circular shrine surmounted by votive disks is

⁹ Schreiber, *Hellen. Reliefbilder*, lxx.

¹⁰ Schreiber, *Hellen. Reliefbilder*, lxxx. This design, as regards erection of the *liknon*, does not stand alone. On a relief in Copenhagen in the Thorwaldsen Museum (Schreiber, lxix.) a *liknon* is seen erected on a similar structure; above it is a great goat's head, no doubt as a

προβάσκάνιον. In a relief in Vienna (Schreiber, xcvi) a *liknon* is represented as set up in much simpler fashion. It stands on a plain pillar; near it are masks, a lyre, and other Dionysiac gear. In an unpublished relief in the Campo Santo at Pisa the *liknon* is accompanied by a youth ringing a bell.

a high erection crowned by a liknon containing a phallos, leaves, and fruits. From the pedestal which supports the liknon are suspended two bells, set there no doubt with prophylactic intent. The liknon in this case has no handles but is furnished with holes at the side. It is clearly open at the left end, as the grapes and leaves fall over.



FIG. 6.—LIKNON ERECTED. (Hellenistic Relief in Munich.)

This relief is of considerable importance, because it enables us to understand a reference to the liknon in Sophocles. In one of the fragments the following injunction is issued to, presumably, the craftsmen of Athens:

*βᾶτ' εἰς ὁδὸν δὴ πᾶς ὁ χειρῶναξ λεώς,
οἱ τὴν Διὸς γοργῶπιν Ἐργάνην στατοῖς
λίκνοισι προστρέπεσθε.*¹¹

The Ergane worshipped with the service of *likna* is, as I have elsewhere¹² suggested, goddess of Ἔργα in the Hesiodic sense of tilled land, rather than of the needle and the loom, and even the 'craftsmen folk' worship her with her accustomed agricultural rites, with the offering of firstfruits in *likna* formally set up somewhat after the fashion of the *liknon* in Fig. 6. Of course in primitive days the *likna* would be set up in a simpler way, without the elaborate architectural surroundings.

So far then we have clearly established that the *liknon* was a basket of peculiar shape used as a cradle and for firstfruits. But the word *liknon* itself is evidence that both these uses are secondary. The word *λίκνον* is derived¹³ from a root which means to clean grain by winnowing. The

¹¹ Soph. *Fr.* 724.

¹² *Cl. Rev.* 1894, p. 270 f.

¹³ The etymology of *λίκνον* is discussed later, p. 311.

question at once arises: have we any evidence that a basket such as that used for a cradle and for firstfruits was used for the actual operation of cleaning grain, and if so how?

Happily baskets of precisely the same shape as the *liknon* of the Greek monuments just discussed are still in use for winnowing, and the process, though almost obsolete owing to the introduction of winnowing machines, can still be seen.¹⁴

In Fig. 7 we have the side view of a winnowing basket now in the Fitzwilliam Museum. The side view is given that it may be compared with the



FIG. 7.—MODERN WINNOWING 'FAN' FROM FRANCE.

liknon seen in profile in Figs. 1, 2 4, 5, and 6. The comparison will show that the shapes are closely analogous.

In Fig. 8 the *liknon* is in use. The photograph was advisedly taken so as to show the winnowing basket in as nearly as possible the same position as the basket in Fig. 3. The basket in Fig. 3 has, as already observed, no handles, otherwise the analogy is seen to be very close.

The art of winnowing with this form of basket is difficult to describe

¹⁴ The 'fan' in Fig. 7 was obtained from France by Mr. Francis Darwin. It is now in the Ethnographical Department of the Fitzwilliam Museum Inv. E. 1903. 309. The shape is the same as that depicted by Millet in his 'Winnowing.' Such fans are still in use to-day in Cambridge as baskets and are regularly imported. Mr. Darwin's gardener, who is represented winnowing in Fig. 8, states that the 'faus' were in

use for winnowing when he was a boy, but the art of winnowing with them is now only known to a few old men. At Skelwith Fold near Ambleside in Cumberland, Mr. Darwin tells me, a basket of slightly different shape is still made of thin laths of willow and used occasionally as a winnowing. A specimen is now in the Fitzwilliam Museum together with the fan in Fig. 7.

and by no means easy to acquire. The winnower takes as much of grain and chaff-mixed as he can conveniently hold and supports the basket against the knee. He then jerks and shakes the basket so as to propel the chaff towards the shallow open end and gradually drives it all out, leaving the grain quite clean. The difficult art of the winnower consists in a peculiar knack in shaking the basket so as to eject the chaff and keep the grain. The beginner usually finds that he inverts the procedure. The wind plays no part whatever in this process. It can be carried on with success on a perfectly still



FIG. 8.—WINNOWING 'FAN' IN USE.

day, but it is necessarily a somewhat tedious method and requires a highly skilled labourer.

It has been repeatedly noticed that the characteristic form of the *liknon* is that it is shovel-shaped, high at one end, low at the other. This is a foolish shape for a fruit-basket, but essential to the process described. The grain and chaff can be scooped up in the basket itself, the high back prevents the escape of the grain, the low wide open part facilitates the escape of the chaff. The handles are convenient though perhaps not quite indispensable.

The process described explains, I think, an illustration used by Aristotle.¹⁵

¹⁵ Arist. *Metcor.* 368^b, 29. σεισμοῦ γενομένου ἐπιπολάζει πλῆθος λίθων ὥστερ τῶν ἐν τοῖς λίκνοις ἀναβραττομένων.

He says 'after an earthquake has taken place a number of stones came up to the surface like the things that are seethed up in *likna*.' When the winnowing basket is agitated the chaff rises up and sprays over the shallow end. Liddell and Scott explain the passage as meaning the 'scum left in sieves,' but a *liknon* is not a sieve, and if it were it would offer no analogy. The object of the process is of course the complete elimination and abolition of the chaff. It is of this that Clement¹⁶ of Alexandria is thinking when he takes the *liknon* as a symbol of utter destruction: 'let us then flee from convention . . . it chokes a man, it turns him away from truth, it leads him away from life, it is a snare, it is a pit, it is a gulf of destruction, it is a *liknon*, an evil thing is convention.' In Egypt, if we may trust Plutarch,¹⁷ winnowing was actually used as a method of utter destruction. In his discourse *On Isis and Osiris* he says on the authority of Manetho that in the dog days they used to burn men alive, whom they called Typhonians, and 'their ashes they made away with by winnowing them and scattering them asunder.' Hence to Christian writers the fan became the symbol not only of purification, but for the ungodly of perdition;¹⁸ but this symbolism is happily unknown in classical times.

Evidence both literary and monumental has clearly proved that the *liknon* was used as a basket for fruits and as a cradle in classical days. A basket of almost precisely the same form is, it has also been shown, used in many countries to-day for the purpose of winnowing. There is, therefore, practically no doubt that the *liknon* was actually used as a winnower among the Greeks. None the less, however, is it certain that the *liknon* was not the only or perhaps the most frequent implement employed.

The implement employed in Homeric days, or at least one of the implements, was of such a shape that an oar or rudder could be mistaken for it. Teiresias in Hades foretells to Odysseus what shall befall him after the slaying of the suitors; he is to go his way carrying with him a shapen oar or rudder till he comes to a land where men have no knowledge of sea-things, and a sign shall then be given to him where he is to abide. Teiresias thus instructs him:

ὅππότε κέν δὴ τοι ξυμβλήμενος ἄλλος ὁδίτης
φήη ἀθηρηλοιγὸν ἔχειν ἀνὰ φαιδίμφ ὦμφ,
καὶ τότε δὴ γαίῃ πήξας εὐήρες ἐρετμόν, κ.τ.λ.¹⁹

The word translated ordinarily 'winnowing-fan' is not *λίκνον* but *ἀθηρηλοιγός* 'chaff-destroyer.'²⁰ Such a word, suitable enough to the obscurity

¹⁶ Clem. Al. *Protr.* xii. 118. φύγωμεν οὖν τὴν συνήθειαν . . . ἔγχει τὸν ἄνθρωπον, τῆς ἀληθείας ἀποτρέπει, ἀπάγει τῆς ζωῆς, παγίς ἐστιν, βόθρος ἐστίν, βάρβαρόν ἐστι, λίκνον ἐστίν. κακὸν ἡ συνήθεια.

¹⁷ Plut. *de Is. et Os.* 73. 380 D: ζῶντας ἀνθρώπους κατεπίμπρασαν, ὡς Μανέθως ἱστορήκε, Τυφωνέους καλοῦντες, καὶ τὴν τέφραν αὐτῶν λικμῶντες ἠφάνιζον καὶ διέσπειρον.

¹⁸ Luke 3, 17.

¹⁹ Hom. *Od.* xi. 127.

²⁰ Sophocles in the *Acanthoplex* called the winnowing fan ἀθηρόβρωτον ὄργανον. The line is preserved by Eustathius *ad Od.* xi. 128.

ὦμοις ἀθηρόβρωτον ὄργανον φέρων.

The variant form makes it doubly clear that the name was a fanciful oracular epithet.

of an oracle, is obviously not one in common use; it is too cumbersome for daily handling; but none the less the main fact stands out clearly that it was an implement that could be carried over the shoulder, that roughly speaking it looked like an oar,²¹ and hence that it must be a thing perfectly distinct from the cradle-basket.

There was then a form of winnowing-fan similar in shape to an oar and oracularly called a 'chaff-destroyer.' What was its ordinary name and what do we know of its precise shape and method of use?

As to the shape of the winnower: Eustathius²² in commenting on the word 'chaff-destroyer' says that it is a shovel (πτύον), and he adds that the analogy is explained by the fact that both the things compared are also called blade, the 'oar is the blade of the sea,' the 'shovel the blade of the dry land.' That the 'chaff-destroyer' was a shovel is also expressly stated by the Venetian scholiast,²³ who says 'ἀθηρολογόν (σίρ) with acute accent on the last syllable; it means the shovel (πτύον).'

The 'chaff-destroyer' then is a form of shovel. Of the use of the shovel (πτύον) in winnowing we learn more from another Homeric passage. Hector lets fly an arrow against Menelaos, it strikes his corslet and rebounds:

ὥς δ' ὅτ' ἀπὸ πλατέος πτυόφιν μεγάλην κατ' ἀλῶν
θρῶσκωσιν κύαμοι μελανόχροες ἢ ἐρέβινθοι
πνοιῇ ὑπο λιγυρῇ καὶ λικμητήρος ἐρωῇ.²⁴

Here clearly the shovel (πτύον) is used to toss up the grain against the wind; the wind is the natural winnower and man helps it by exposing the mixed seeds and husks for the wind to sift. It is a process wholly unlike that described in relation to the winnow-basket (λίκνον). This comes out yet more clearly in another Homeric simile:

ὥς δ' ἄνεμος ἄχνας φορέει ἱερὰς κατ' ἀλῶν
ἀνδρῶν λικμώντων, ὅτε τε ξανθὴ Δημήτηρ
κρίνη ἐπειγομένων ἀνέμων καρπὸν τε καὶ ἄχνας.²⁵

Here the winnowing instrument, the πτύον or shovel, is not mentioned

²¹ An oar or rudder: the Greek ἐρέμῶς, Latin *remus*, our rudder all came from the same root. Oar and rudder seem at first not to have been clearly distinguished. See Schrader *Real-lexicon* s.v. 'Rudern.' Odysseus with the oar or rudder is represented on two gems: see my *Myths of the Odyssey* Pl. 30 a and b.

²² Eust. *ad Od.* xi. 128, 1676. 49 ἀθηρολογόν, ὃ ἐστι πτύον, λικμητήριον τὸ τῶν ἀθέρων ὀλοθρευτικόν.

²³ Schol. Ven. *ad Od.* xi. 128 ἀθηρολογὸν ὀξυτόνως· δηλοῖ δὲ τὸ πτύον. The scholiast goes on οἱ δὲ νεώτεροι τὸ κίνητρον τῆς ἀθέρας οἶονται. I do not know exactly what he means by a κίνητρον, it must be some instrument for shaking the grain. Possibly οἱ νεώτεροι confused the liknon-basket with the shovel.

²⁴ Hom. *Il.* xiii. 588. Eust. *ad loc.* πτύον δὲ οὐ δι' οὗ γῆν ἀναρρίπτουσιν ἀλλὰ λικμητικοῦ ἀναβάλλοντος τὰ ἡλοημένα τοῦ καὶ εἰς τύπον ἐσχηματισμένου χειρὸς δακτύλων. . . διδὲ τῇ ἐκ τοῦ βασιλικοῦ θώρακος ἀποπλανήσῃ τοῦ οἴστοῦ ἥ τις κατὰ τὴν ἐκ τῆς χειρὸς τοῦ Ἑλένου ἔπρακτον συνδιανοεῖται βολὴν, δόξοι ἂν ὁ ποιητὴς μυκτηρίζειν ὥς εἶον ἀπὸ ξυλίνης καὶ ὁμωνύμως λεγομένης χειρὸς εἰκὴ ἀφεμένου τοῦ βέλους, κ.τ.λ. Schol. Ven. *ad loc.* πτυόφιν]. πτύον, πτύον δὲ ἐστὶν ἐν ᾧ τὰ ἡλοημένα γεννήματα ἀναβάλλουσι χωρίζοντες τοῦ ἀχύρου. . . τινες τὰ μὲν σιδηρὰ πτύα, τὰ δὲ ξύλινα καὶ τρόπον χειρὸς ἔχοντα οἷς καὶ τὴν γῆν μεταβάλλουσι καὶ τοὺς ἀστάχνας ἀναρρίπτουσι θρίνακας φασί. Παρὰ δὲ Ἀττικοῖς πτύα.

²⁵ *Il.* v. 499. No scholia on this passage are extant.

but the process is clear. The grain is tossed up, exposed to the air and wind as the hay is with us in haymaking; the wind carries the chaff to a distance and the heavier grain falls short in a growing heap.^{25a}

The scholia on *Iliad* xiii. 588 are instructive, if at first sight somewhat startling. Eustathius after praising the apposite elegance of the simile proceeds to explain *πτύον*. 'It is not the kind (of shovel) with which they throw up earth but a winnowing sort for casting up threshed grain, and is shaped in the form of the fingers of a hand. . . . Hence the poet seems to be sniffing at the glancing of the arrow from the king's corslet, conceived as importing the ineffective discharge from the hand of Helenos, as though the shaft were sent at random from a wooden hand that bore the like name.'

Eustathius, it is quite clear, holds that the *ptyon* is in shape like a hand, though in his desire to emphasize the hand he confuses the metaphor. Homer is thinking of the swift vain glancing of the arrow from the corslet; he says and cares nothing for the shape of the thing from which it glances; but the over-subtlety of Eustathius is of great use to us, as it emphasizes the fact that he believed the *ptyon* to be *hand-shaped*.

The Venetian scholiast confirms Eustathius, and adds a useful clue. He says a *ptyon* is 'that in which they threw up products of the threshing floor, clearing them from chaff.' So far we should think that by a *ptyon* was meant an ordinary shovel in which the grain was thrown. But his next remark shows that the *ἐν, ἰν,* means rather *by* than strictly *in*. 'Some call those made of iron *ptya*, but those made of wood and having the shape of a hand and with which they turn over earth^{25b} and throw up stalks of grain they call *thrinakes*. But in Attica they are called *ptya*.'

Ordinary implements were in Homer's days not made of iron, so we may dismiss the iron *πτύον* from the question. A *thrinax*, *i.e.* a trident, or thing with three prongs, has some faint resemblance to the fingers of a hand, but a *thrinax* as we understand it, *i.e.* a three-pronged fork, does not commend itself as the ideal winnower. Excellent for haymaking, it would obviously allow mixed chaff and grain to slip through before it was tossed against the wind.

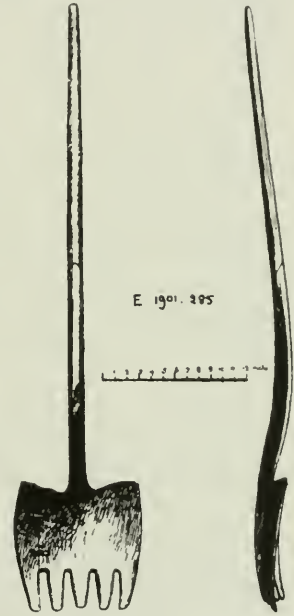


FIG. 9.—CRETAN θυννάκι.

^{25a} The process is very clearly explained in Xenophon's *Oeconomicus* xviii, but Xenophon does not name the implement used.

^{25b} Mr. Bosanquet points out that the words of the Venetian scholiast must have got misplaced; his οἷς τὴν γῆν μεταβάλλουσι corresponds

to the δι' οὗ γῆν ἀναρρίπτουσι and must have belonged to σιδηρᾶ. To this day in Greece *πτύα* (*i.e.* *φτυάρια*) are used only for moving earth already dug and there is no such thing as a spade driven in with the foot.

Happily the difficulty, which from classical evidence alone would be well-nigh insuperable, is instantly solved by the witness of the winnowing implement in use to-day in Crete and elsewhere in Greece. In Fig. 9 we have a *thrīnax*, and a glance at the illustration will show that it is neither fork nor shovel, but an ingenious blend of both. The specimen²⁶ from which the drawing is made was bought by Mr. Bosanquet at Khandra, and is now in the Fitzwilliam Museum at Cambridge. Mr. Bosanquet kindly tells me the name by which the instrument is now called was written down for him by his Greek foreman, who spells phonetically, as *θυρνάκι*. As pronounced by the Greek *θυρνάκι* is absolutely indistinguishable from *θιρνάκι* which is therefore probably the form that would be given by the educated. *θιρνάκι* is of course *θιρνάκιον*, the diminutive of *θίρναξ* = *θρίναξ*. The fondness of modern Greek for diminutives is well known. The operation in which the *θυρνάκι* is used is known as *λίχνισμα* not *λίκνισμα*. I asked Mr. Bosanquet to ascertain whether the *θυρνάκι* was ever called a *πτύον*, and he writes 'It might be called *φτυάρι* very easily, that being the common word for a shovel. I induced the Cretan to explain the shape of *θυρνάκι* thus, 'εἶνε ὡς εἶδος φτυάρι' 'it is something like a shovel.'²⁷

It may be objected that the *θυρνάκι* of Crete is falsely so-called, as it has five, not three, prongs. An old gloss²⁸ tells us that the same laxity in terminology prevailed in the case of the ancient *θρίναξ*. The *θρίναξ* was strictly of course the trident, as of Poseidon, but it was also 'an agricultural implement also called a *likmētērion*, since it was trident-shaped and as it were three-nailed, or,' the gloss adds significantly, 'it was a corn shovel, with teeth, and was also called five-fingered: the which is a *likmētērion*.' Wooden *trinakes*, a writer in the Anthology²⁹ says, are the 'hands of field labourers,' and the five-pronged *thrīnax* or *trinax* would of course present the closest analogy.

In fact so well established was the five-pronged form of the winnowing implement that Eustathius uses it as an illustration to explain other five-pronged instruments. Thus in commenting on the passage in the Iliad³⁰

²⁶ Now in the Anthropological Department of the Fitzwilliam Museum. My grateful thanks are due to the Director, Baron Anatole von Hügel, for his kind permission to publish the *θυρνάκι* and to Miss Edith Crum for the accurate drawing reproduced in Fig. 9.

²⁷ Since the above was written Mr. Bosanquet kindly tells me that not only in Crete but quite recently he has seen at Siyeon the process of winnowing with the *θυρνάκι*. The forks there used were of two types: the home-made, usually 3-pronged, cut from a tree with twigs in that form, and the shop-made, usually a 4-pronged spade, and very 'hand-like,' cut from a plank.

²⁸ Cyr. gl. *Vind.* 171 *θρίναξ*· σκευὸς γεωργικὸν δὲ καὶ λέγεται *λικμητήριον*· ἐπεὶ δὲ τριακονταδής ἐστι καὶ οἶονεϊ τριόνυξ· ἢ πτύον τοῦ σίτου ἔχον

ὑδοντας πέντε δὲ καὶ λέγουσι πεντεδάκτυλον, ὃ ἐστὶ *λικμητήριον*. Hesychius defines *θρίναξ* as *πτύον σίτου ἢ τρίακοντα*. The scholiast on Nicandros *Theriaca* 114 says: *θρίναξ*· γεωργικὸν τί ἐστι σκευὸς ἔχον τρεῖς ἑξοχὰς καὶ σκόλοπας ἀπωξυμένας ᾧ τὰς στάχνας τρίβουσι καὶ *λικμῶσι* καὶ ἀπαχυρίζουσι.

²⁹ Anth. Pal. vi. 104

καὶ *τρίνακας* ξυλῖνας χεῖρας ἀρουροπόνων. Such a 'fan' Mr. Bernard Darwin kindly reminds me, points a comparison in the 'Arabian Nights.' In the 'Story of the Second Royal Mendicant,' Jarjarees appears 'in a most hideous shape with hands like winnowing forks.'

³⁰ *Il.* i. 463 νέοι δὲ παρ' αὐτὸν ἔχον πεμπώ-βολα χερσίν. Eustath. *ad loc.* φασὶν οἱ παλαιοὶ ὡς οἱ μὲν ἄλλοι τρισὶν ἔπειρον ὀβελοῖς, οἱ λέγοιντο ἂν τριώβολα· μόνον δὲ οἱ Κυμαῖοι,

when at a banquet following after sacrifice Homer says: 'And by his side the young men were holding five-pronged forks'; he says: 'according to the ancients other people used three prongs for spitting which might be called *triobola*. The Cumaeans alone who were of Æolic race used *pempobola*; the word *pempobolon* is Æolic like the usage . . . and this *pempobolon* in use among the Cumaeans resembles the fingers of a winnowing shovel or the teeth of a trident.'

The Cretan *θυρνάκι* looks to our modern eyes like a spade. But the spade, familiar though it is to us, is not, it would seem, a very primitive implement. A wooden spade will not penetrate hard earth. Until iron comes into general use, and even after with a people who work unshod, the ordinary method of digging is to break up the earth with a pick and then if need be shovel it away with a shovel. Our wooden spade is a combination of pick and shovel in one, but a wooden spade like the Cretan *θυρνάκι* is a shovel only, of no possible use for digging. For winnowing, however, it is an admirable instrument; the prongs help to penetrate into and pick up the mixed mass of stalks and grain, and the broad curved surface is an excellent shovel.

It is then I think abundantly clear that Eustathius believed the *ptyon* of Homer to be an instrument with either three or five prongs, and that this instrument was substantially the same as the Cretan *θυρνάκι*. We are so accustomed to associate the trident with the sea that it is a mental effort to transport it inland. Hesychius³¹ knew of the two uses; he defines *thrinax* as 'the *ptyon* of grain or the trident.' Whether the actual implement confused by the landsman with an oar had teeth³² like the Cretan *θυρνάκι* or was a simpler form of shovel³³ with a long handle, it is of course impossible to determine, nor is it for the present discussion a matter of great importance.

It has been seen that the *liknon* was 'set up' in the service of Athena goddess of tilth. The *ptyon* in like fashion was erected at harvest festivals, perhaps in token that the work was ended.^{33a} Theocritus at the

Αἰολικὸν δὲ οὔτοι ἔθνος, πεμπωβόλοις ἐχρῶντο.
ἔστι δὲ ἡ τοῦ πεμπωβόλου λέξις Αἰολική, καθὰ
καὶ ἡ χρῆσις . . . ἔοικε δὲ τὸ παρὰ τοῖς Κυμαίοις
τοῦτο πεμπώβολον δακτύλοις πτύου λικμητικοῦ
ἢ ὁδοῦσι τριαίνης.

³¹ Hesych. s.v. θρίναξ· πτύον σίτου ἢ τριaina.
In the Attic dialect the πτύον was called πτέον.
See Eustath. ad II. xiii. 588, 948. 19.

³² It has been suggested by Mr. R. C. Bosanquet (*J.H.S.* 1902, p. 389) that the trident implements carried by the procession of men in the remarkable steatite vase found at Hagia Triada near Phaestoa are *θυρνάκια*, and that the whole scene depicted is a Harvest Home. Sig. Savignoni who published the vase (*Monumenti dei Lincei*, 1903, Tav. I) believes the implement to be a weapon of war. After com-

paring the implements on the vase with the Palestine winnow-fork figured by Hastings (*Dict. of the Bible*, s.v. Agriculture) I believe Mr. Bosanquet's conjecture to be correct. In this case the supposed 'axes' tied to the 'winnow-forks' must be some form of sickle. I propose to return to this question at a later date, after examining extant forms of prehistoric sickles.

³³ A shovel with leaf-shaped blade and long handle is, Prof. Ridgeway kindly tells me, still to be seen in Ireland. A similar instrument is held over the shoulder of the winnower in one of the panels that decorate Pisano's fountain at Perugia.

^{33a} Since the above was written Mr. Bosanquet has kindly sent me an account of win-

close of his harvest Idyll, in which the festival of Demeter, the Haloa, has been described, prays

ὡς ἐκὶ σωρῶ
αὐθις ἐγὼ πᾶξαιμι μέγα πτύον· ἡ δὲ γελάξαι,
δράγματα καὶ μάκωνας ἐν ἰμφοτέραισιν ἔχοισα.³⁴

Here the word usually rendered 'fan' is πτύον. The verb used for the operation of fixing or planting it is πηγύνμι; the word used for setting up the *liknon* was it will be remembered ἰσθάναι. The scholiast explains: 'when they winnow and heap the grain up, they plant the *ptyon* in the middle, and deposit the *thrinax*. The reason he (Sophocles) explains in the Triptolemus.' The verb πηγύνμι it will be remembered was used of the setting up of the oar of Odysseus.

The *liknon*, it has been seen, was made of wicker-work, the *ptyon* of wood, and later of iron. In a fragment of the *Proteus* of Æschylus some one tells of

Σιτουμένην δύστηνον ἀθλίαν φάβα,
μέσακτα πλεύρᾳ πρὸς πτύοις πεπλεγμένην.³⁵

The *liknon* would be no danger even to a dove, but a bird rashly feeding might easily be caught and crippled by such an instrument as the Cretan *θυρνάκι*.

The *thrinax* we may then take it was a form of *ptyon*; but all forms of the *ptyon* were assuredly not *thrinakes*. The word *ptyon*³⁶ could be used of any instrument used to 'throw off,' to cast away impurities. The root of *ptyon* is probably onomatopoeic like our 'spit.' The shovel-shape was a convenient form for this purpose. But the shovel, though it took its name from this function of 'throwing off,' had other uses. It was used as a grain measure.

nowing as it takes place to-day in Teneriffe. The account, vouched for by Mr. Holford Bosanquet, F.R.S., is of special interest as showing that the planting of the *ptyon* is a custom still maintained in modern times and also because in Teneriffe, it appears, three forms of winnowing implements substantially identical with the *θρίναξ* the πτύον and the *λίκνον* are still employed. The process is described as follows. 1. Threshing takes place on a circular floor partly by hoofs of freshly shod ponies or of oxen, partly by a sledge studded with sharp stones—the straw is turned over with a wooden 3-pronged fork cut from twigs in that form. 2. Winnowing is performed with a prongless wooden spade. Thus where the Greek has one implement, the *θρίναξ*, the inhabitant of Teneriffe has two, the prongless πτύον for actual winnowing and the true *θρίναξ* for turning over and heaping together the masses of straw and grain over which the sledge or the line of horses go round and round. 3. On finishing

his task with the prongless spade (πτύον) the winnower plants it in the centre of the heap of grain as a sign that his task is done. About this time or a little earlier the women set to work on the mixture of the grain and chaff which lies beside the main heap. They winnow the dregs of the threshing-floor in a basket which is to all intents and purposes a *λίκνον* except that it has no open side. The worker gives a rotatory motion to the contents and as they move round and round the difference of weight separates the chaff, etc., which are then thrown out by the hand.

³⁴ Theocr. *Id.* vii. 155. Schol. ὅταν δὲ λικμώνται καὶ σωρεύωσι τὸν πυρὸν κατὰ μέσον πηγύνουσιν τὸ πτύον καὶ τὴν θρινάκην κατέθεντο. Τὴν δὲ αἰτίαν εἶπεν ἐκ Τριπτολέμου.

³⁵ Aesch. *frag.* 194 (ap. Athen. ix. 394a).

³⁶ Etym. Mag. s.v. πτύον. παρὰ τοῦ πτύω, τὸ ἀποπτύνει καὶ ἀπορρίπτει τῶν καρπῶν τὰ ἄχυρα. τὸ δὲ πτύω σημαίνει τὸ ἀπορρίπτειν καὶ ἐκβαλεῖν, ἔλθεν καὶ τὸ ἀποπτύω.

Hesychius³⁷ in explaining the word *díptyon* says: the Cyprians give this name to a measure, others say it is half a medimnus. Obviously the Cyprian measure was twice the contents of a standard *ptyon*, a scoop or shovel; whereas a *thrinax* could never have been used as a measure.

The two instruments *thrinax* and *ptyon* are separately mentioned in the list of agricultural implements in the Edict of Diocletian.³⁸ The *ptoion*, obviously the same as the earliest form *ptyon*, costs 12 denarii, the *thrinax* only 8. Both prices are so low that presumably both implements were of wood.³⁹

Bearing in mind that the *ptyon* is a scoop or shovel like its modern descendant the *φτυάρι*, it is easy for us to see how it might be confused by lexicographers with the *liknon*-basket. The *liknon* indeed, if we may trust the *Etymologicum Magnum*, was called a *ptygariou*,⁴⁰ i.e. a small *ptyon*. 'The ancients,' the lexicographer adds, 'made the sons of their house sleep in *ptygaria* for the sake of fertility.' The wooden corn-scoop, like the wicker winnowing basket, would be quite suitable for a cradle.

Although the *liknon* might easily be called *ptygariou* from its shovel-shape, the cardinal distinction between the processes of winnowing by the two implements, the *liknon* and the *ptyon*, remains. With a *ptyon* you throw grain and chaff together into the air and they are separated either by the wind or by their own specific gravity. With a *liknon* you shake the mixture in the vessel itself; the chaff gradually escapes but the grain remains in the *liknon*. The processes have nothing in common except that they both seem to purify corn. The operation of *throwing* the grain is naturally best performed with a long-handled implement like the *thrinax*, the operation of shaking it needs either two handles or none at all. As regards the advantages of the two processes it is clear that the *throwing* of the grain is a more rough and ready, and much more rapid process, the shaking operation is tedious but thorough. If stalks have been left with the grain, the throwing operation is the only one practicable.

Besides these two methods of winnowing, the throwing and the shaking carried on respectively with the *ptyon* and the *liknon*, there remains a third

³⁷ Hesych. s.v. *δίπτυον*. *Κύπριοι μέτρον. οἱ δὲ τὸ ἡμιμέδιμνον*. In late Latin *rannus* is also a measure; see Ducange s.v.

³⁸ *J.H.S.* xi. 1890 p. 309. In the Edict the word *Δηλάβρα* is given as the equivalent of 'πτοῖον.' *Δηλάβρα* is obviously the Latin *dolabra*. This looks as if the πτοῖον of the inscription were more like the *θρίναξ* than an ordinary scoop; but clearly the two are distinguished.

³⁹ In Hastings' *Dictionary of the Bible*, s.v. *Agriculture*, two instruments are figured and said to be in use in Syria, which correspond very closely to the *πτύον* and *θρίναξ*. One of them is a fork with four prongs, the other a shovel with a long handle. These two instru-

ments are said to correspond to the two Hebrew words translated in our version of the Bible by fan and shovel; Isaiah xxx. 24, 'clean provender which hath been winnowed with the shovel and with the fan.' Unfortunately the Dictionary does not state any facts as to the provenance of the implements figured. Vogelstein, *Landwirtschaft in Palästina*, p. 68, states that in Palestine a fork with three prongs is used for a preliminary single tossing, then a fork with seven prongs, and then a still finer implement; the final purification is effected by a sieve as in modern Greece.

⁴⁰ Etym. Mag. *Λείκνον σημαίνει τὸ πτυάριον . . . καὶ γὰρ οἱ ἀρχαῖοι ἐν τοῖς πτυαρίοις ἐπόλουν τοὺς οἰκείους νιούς καθεύδειν, διὰ τὸ πολύγονον*.

method, that of cleansing through a sieve, *i.e.* a vessel the bottom of which is pierced by holes. Servius, it will be remembered, defined the *liknon* as a *cribrum areale*, a 'sieve of the threshing floor.' In the Edict of Diocletian already referred to (p. 307) there is a separate heading 'concerning sieves.' Sieves are regarded as quite distinct from the '*ptoion*' and '*thrinax*.' Among the various sieves one is called 'a sieve of the threshing floor made of hide,' and we learn to our surprise that it cost 250 denarii. The passing through a sieve was of course a more delicate process than the tossing up with the *ptyon*. Mr. Bosanquet kindly tells me that in Greece to-day, after the mixed grain and chaff has been winnowed by the men with the *θυρνάκι*, the women further cleanse it by passing it through a sieve. The sieve appears to be a very peculiar implement. In the stone-age pierced jars were used for sifting. The bottom of the sieve of modern Greece is not infrequently a pierced petroleum tin. The *koskinon* or round sieve is, Mr. Bosanquet says in use in every modern cottage and—an interesting point—it is used as a vessel for carrying as well as for sifting. At a modern Greek inn the feed of oats for your horse is often brought and rattled about before you in a *koskinon* to show that it is all good grain, no chaff; whereas, as Mr. Bosanquet reminds me, in an English stable corn is brought from the bin to the manger in a wooden tray with sloping sides open at one end, a vessel oddly like a *liknon*. A 'fan' of this tray-shape is, Dr. Haddon kindly tells me, used for winnowing by the agricultural peoples of the East Indian Archipelago.

The real distinction between *liknon* and sieve, a distinction overlooked by Servius, is that the *liknon* is open at one side. This is an impossible shape for a sieve, as the grain when rattled would fly out, but it is clear that either could be used to carry firstfruits. Hence the confusion of Servius,

The modern Greek uses then the *θυρνάκι*, a special form of *ptyon*, to throw his grain; he uses also the *koskinon* to cleanse it more completely. Of the use of the *liknon*, Mr. Bosanquet again kindly tells me, he can find no trace. It is indeed rare to find all three varieties of winnowing implements in use in one country. The only country known to me in which all three exist, though in different districts, is Finland.⁴¹

For more convenient comparison the winnowing implements of Finland are collected together in one illustration (Fig. 10).

In the right hand bottom corner of Fig. 10 is the winnow shovel used throughout Finland for the preliminary tossing of the grain. The shovel here figured is of wood; its blade is 28 cm. long, its handle 14 cm. The shovel was in use in the province of Savolax and is now in the Museum of the Institute at Mustiala.

The sieve immediately above the shovel is from the parish of Jorvis also in the province of Savolax. After the grain has been tossed and piled

⁴¹ The particulars as to Finnish methods of winnowing and the drawings reproduced in Fig. 10 were sent to Mr. Darwin by Prof. Grotenfelt, who most kindly allows me to

make use of them. Three of the illustrations are figured in Prof. Grotenfelt's book on Finnish primitive methods of agriculture: *Det primitiva Jordbrukets Metoder i Finland*.

in a heap, a woman takes a sieve, places herself in the doorway, where there is a considerable draught, and shakes the sieve with some violence. The seeds of weeds, etc., fall through the sieve and the dust is blown away. Pieces of stalk, husks, lumps of earth and the like collect on the top of the grain, and the woman picks them off.

In West Finland this secondary purification is performed not by a sieve but by the vessel reproduced at the top of Fig. 10, obviously the same in form as the Greek *liknon*. The specimen here figured came from the parish of Sibbo in the province of Nyland and is now in the ethnographical Museum of

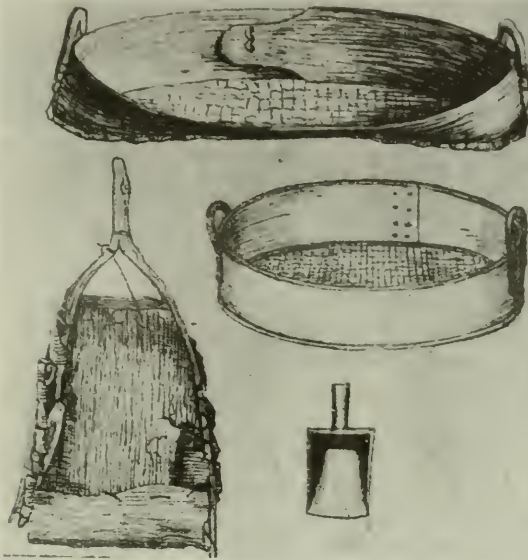


FIG. 10.—WINNOWING IMPLEMENTS IN USE IN FINLAND.

Helsingfors. It is 0·9 inches long by 0·6 broad by 0·15 high. The bottom is ordinarily made of birch-bark, and the sides of aspen. The front, as shown in Fig. 10, hangs forward, the back is vertical. It is furnished with handles at the side like the *liknon*. A woman takes the vessel, fills it with grain, and shakes it; the dust is blown away, and bits of straw and husks, etc., slide off over the front edge. In some parishes the grain is emptied from this vessel into a sieve, to be purified.

Here it is seen very clearly that for sieve and *liknon* alike the operation is one of shaking, but the method of escape of the impurities is different.

These Finnish methods of winnowing, combining as they do all three implements, the *ptyon* or shovel, the *liknon* or basket, the *koskinon* or sieve, enable us to understand the confusion of all three by the lexicographers; and Suidas is no longer obscure, though certainly inaccurate, when he says:

Liknon, a *koskinon* or a *ptyon*.

All three are different forms of an implement for one purpose, *i.e.* winnowing.

Fortified by a fairly complete understanding of the form and use of the *liknon* we are able to return to Servius and the *vannus*. The Latins had like the Greeks three main different forms of winnower, and these were the *ventilabrum*, the equivalent of the *ptyon* or spade-shovel; the *vannus*, the equivalent of the *liknon* or basket-winnower; and the *cribrum*, the equivalent of the *koskinon* or sieve.

About the *cribrum*,⁴² the discernor or *sieve*, there is no difficulty. As to the first and second, the *vannus* and *ventilabrum*, a word must be said.

First, the *vannus* and the *ventilabrum* are distinguished by Latin writers as separate implements. Varro⁴³ in his discussion of agricultural matters writes of the process of winnowing thus: 'the ears having been threshed, it is needful to throw them up into the air with *valli* or *ventilabra* when there is a gentle wind . . . This is done that the lightest part of them, that which is called chaff, may be fanned away beyond the threshing floor, and the grain which is heavy may come pure to the basket.' The word *vallus* is of course *vannulus*, the diminution of *vannus*. All that we learn from this passage of Varro is that there were two implements, the *vallus* or *vannulus* and the *ventilabrum*. Elsewhere he says *valli* were made of wicker-work.⁴⁴ Columella is more explicit. After stating that the west wind is the best for winnowing he adds that to wait for that wind is the sign of a slothful husbandman, and concludes: 'If for several days the wind be low in all quarters let the corn be cleaned by vans, lest after an ominous calm a furious storm destroy the labours of the whole year.'⁴⁵ Here clearly the *vannus* is the implement to be used when there is no wind, the *ventilabrum*, as indeed its name would suggest, is the implement for utilizing the wind, *i.e.* a *ptyon* or *thrinax*. We have already seen that the *liknon* is independent of the wind, and we may therefore conclude that Servius is right in his identification of *liknon* and *vannus*.

Throughout the present discussion, especially in translating quotations from poets, the word 'fan' has been freely used. It is necessary now to enquire what precisely is meant in English by a 'fan.'

⁴² The word *cribrum*, $\sqrt{\text{skar}}$, *kar*, means of course nothing but 'divider,' 'separator'; and similarly the Greek *κόσκινον*, *κο-σκι-νο-ν* is only a reduplicated form of $\sqrt{\text{sak}}$, *ska*, to divide, to separate. Hence a *liknon* might etymologically be called a *koskinon*, since both are dividers. But the Latin *cribrum* and Greek *κόσκινον* were early specialized off to mean implements that divided by means of a perforated surface. Possibly the expression *κόσκινον τετρημένον* (Plato Gorgias 493 n) points to a time when the *koskinon* was not necessarily

perforated.

⁴³ Varr. *R.R.* i. 52. 2. iis (sc. spicis) tritis, oportet e terra subjactari vallis aut ventilabris, cum ventus spirat lenis. Ita fit, ut quod levissimum est in eo atque appellatur acus evannatur foras extra arcum, ac frumentum quod est ponderosum purum veniat ad eorbem.

⁴⁴ Varro *R.R.* i. 23. 5. valli ex viminibus.

⁴⁵ Colum. ii. 21. at si compluribus diebus undique sibilat aura vannis expurgentur ne post nimiam segnitiam vasta tempestas irritum faciat totius anni laborem.

Most educated persons now-a-days, provided they are neither farmers nor antiquaries, if asked what a 'fan' is, would answer: 'an instrument with which to cause wind, to ventilate.' They would also, if acquainted with the Bible, add that in ancient days it was the name given to an instrument used in winnowing: 'His fan is in his hand and he will thoroughly purge his floor.'⁴⁶ If they are classical scholars they will without compunction translate *λίκνον* and *πτύον* by the same word 'fan,' without reflecting that an instrument that resembles an oar is scarcely likely to have been a convenient cradle for a child. The word 'fan' in English covers and conceals a two-fold ambiguity; it is the common name for a ventilator, with no sense of winnowing; it further is the name applied indifferently to any and every form of implement used in winnowing.

The German language has two distinct words for the two distinct winnowing instruments,⁴⁷ and thus avoids much confusion. *Schwinge* or *Getreide-Schwinge* is the word for the *liknon*-basket. *Schaufel* or *Worfschaufel* for the *ptyon* or shovel. According to Dr. Schmidt,⁴⁸ in Lithuanian the two processes are expressed by two words near akin, but from the beginning distinct, *nėkōpi*, which means to clean by *shaking*, *lėksha*, to clean by *throwing*.

It is unnecessary to dwell on the modern use of the word 'fan' for an instrument with which to cause wind; it lent a metaphor to Milton,⁴⁹ who tells how Raphael

'Winnows the buxom air.'

And again in the *Endymion* of Keats

'to fan

And winnow from the coming step of time

All chaff of custom.'

These passages are worth noting because instinctively each poet adds the word winnow, as though without it the metaphor might not be clearly intelligible; the word 'fan' is passing away, at least in literature, from the domain of agriculture.

In Fig. 10 we have left unexplained the fourth instrument on the left. It completes the series of winnowers. The specimen figured is in the Ethnological Museum at Helsingfors and comes from the parish of Sibbo in the province of Nyland. It is not a shovel but a 'fan' in the modern English sense, a sort of hand-broom made of birch-bark. In England also, before the introduction of winnowing-machines, a rude instrument made of sacking stretched on a frame was used to 'raise wind,' and was called a Barn-fan.

It is more important for our purpose to note that the word fan or, as it was often spelt, *van* was used to denote a large shallow wicker basket with handles used for cleaning corn by shaking, and practically the same as the basket in Fig. 3. Chaucer says of one of his characters he 'strouted as a

⁴⁶ Matth. iii. 12. οὗ τὸ πτύον ἐν τῇ χειρὶ αὐτοῦ.

⁴⁸ Schmidt, *Senantentheorie*, p. 103.

⁴⁹ Milton, *P. I.* v. 270.

⁴⁷ Schrader, *Real-lexicon*, s.v. *Würfeln*.

fanne large and brode.' Trapp⁵⁰ in his commentary on Psalm xviii. 8 (1654) says 'chaff will get to the top of the Fan while good Corn lieth at the bottom.' This clearly shows that the process of winnowing of which the commentator is thinking is that described above (p. 300).



FIG. 11.

(From Bontell's *Monumental Brasses*, p. 35.)

Happily as regards the shape of the English 'van' in the 14th century we are not left to the vague witness of literature; we have monumental evidence. The Church of Chartham contains a memorial brass (Fig. 11)⁵¹ to Sir Robert son of Sir Robert de Setvans. The date is about 1306. On the knight's surcoat, ailettes, and shield are emblazoned the family arms, the seven fans. Schematised as they are for heraldic purposes it is quite clear that the 'fans' are wicker baskets with handles, with one side open, like the 'fan' in Fig. 7.

In closing this portion of my discussion of the shape and form of the *vannus* I should like to make a practical suggestion. The word 'fan' is a beautiful word of almost magical associations, and in poetry must and will always hold its own, since in poetry the atmosphere of the word is of far greater importance than its precise scientific association. But in prose and for purposes of exact construing, its use as a uniform rendering for *vannus*, *ventilabrum*, *λίκνον* and *πτύον* is misleading, and has already caused abundant confusion. If some general word is essential I would suggest that 'van' be employed; its slight archaism arrests attention and the misleading modern connotation is avoided. Some further precision might however be with advantage attempted. Could not *vannus* and *liknon*

be rendered by *winnow-corb*? The archaism of *corb* is unobjectionable, since the instrument described is all but obsolete. The words *πτύον* and *ventilabrum* might be rendered in prose *winnow-shovel*, in poetry 'van.' The word *θρίναξ* remains, and is perhaps best rendered *winnow-fork*; though this is not quite satisfactory because the *θρίναξ* is half-shovel, half-fork.

⁵⁰ This quotation and some of those above I owe to the English Dialect Dictionary. The description there given of the operation of winnowing in a basket-fan is as follows. 'Originally it was used to separate the chaff from the wheat by tossing it up into the air and catching it as it fell down, thus allowing the wind to fan out the chaff.' This description reads as though it had been invented on *a priori* grounds; the actual operation as des-

cribed on p. 300 is one of shaking not tossing; the grain never leaves the fan, nor is the wind necessarily utilized. The Dictionary further states that the word 'fan' as meaning a basket or shovel-winnow is obsolete except historically. As already stated the word and the implement are familiar to old people to-day.

⁵¹ Bontell *Monumental Brasses* p. 35. My attention was called to this interesting monument by Professor Bendall.

Now that the exact nature of the 'fan,' its uses and various shapes have been determined, we are able to pass to the second division of our discussion.

2.—*The precise sense in which the 'fan' is called 'mystic.'*

The 'mystic' character of the 'fan' is a fact, not merely the vague fancy of a Latin poet. Harpocration⁵² in discussing the *liknon* says that it was 'serviceable for every rite and sacrifice.' The word translated 'rite' (τελετή) always implies a mystic ceremony of initiation, as contrasted with a mere ceremony of sacrifice (θυσία).

At the outset it should be noted that the only form of winnowing-fan used in mysteries was the *liknon*. The *ptyon* and the *thrinax* might be, and were 'planted' at harvest festivals, but not even an Orphic attempted to mysticize the shovel or the fork: it was about the *liknon* only that mystic associations gathered.

It is necessary at this point to say a word as to what the Greeks meant by a 'mystery.' I have shown elsewhere⁵³ in detail and can only here briefly restate what I believe to be the essential factors of ancient mystery rites. They are two:

- (a) The seeing, handling, and sometimes tasting of certain sacred objects.
- (b) Ceremonies of purification, after which, and only after which, these sacred objects could be safely seen, handled, or tasted.

The *liknophoria* belongs to the class of purification ceremonies.



FIG. 12.—THE *Liknon* IN USE IN ELEUSINIAN MYSTERIES. (From a Cinerary Urn at Rome.)

Fortunately this is no matter of mere conjecture; we have monumental evidence. The design in Fig. 12 is part of the decoration of a cinerary urn

⁵² Harpocrat, s.v. λικνοφόρος· τὸ λίκνον πρὸς πᾶσαν τελετὴν καὶ θυσίαν ἐπιτήδειόν ἐστιν.

⁵³ *Prolegomena to the Study of Greek*

Religion, p. 153. I have here sought to establish that the word μυστήρια is connected rather with μύσος than with μύω.

found in a grave on the Esquiline Hill and now in the Museo delle Terme at Rome.⁵⁴ The scenes represented are clearly rites of initiation. On one portion of the urn (not figured here) we have a representation of the final stage of initiation; the mystic is admitted to the presence of the goddess herself, Demeter, and handles her sacred snake. The remainder of the design (Fig. 12) shows two scenes of preliminary purification: (1) the familiar sacrifice of the 'mystic' pig⁵⁵; (2) purification by the *liknon*. It is on this last that attention must be focussed.

The candidate is seated on a low seat; he holds a torch, also for purification, in his left hand; he rests his right foot on a ram's head, obviously part of the 'fleece of purification'; his head is veiled, and over his head a priest holds the *liknon*. What is contained in the *liknon* it is not possible to say with certainty. It does not I think contain fruits. When the artist wishes to show fruits in a sacred vessel he is quite able to do so, as is seen in the dish of poppy-heads held by the priest to the right, where perspective is violated to make the meaning clearer. Moreover fruits do not symbolize purification, and therefore cannot magically induce it. The *liknon* is I think either empty or holds a little grain and chaff. Anyhow it is clearly part of the apparatus of purification.

The symbolism of the *liknon* is simple and very beautiful, and it should not be hard for us to realize its ritual significance. The Anglican Church still prays in her Baptismal Service that water may be sanctified 'to the *mystical* washing away of sin.' She believes that in some mysterious way the water is not only the symbol of purification but its actual vehicle. The Greek believed that the 'fan' which physically purified grain had power mystically to purge humanity.

This doctrine Servius⁵⁶ states quite clearly. Virgil, he says, calls the vannus mystic 'because the rites of Father Liber had reference to the purification of the soul, and men are purified in his mysteries as grain is purified by fans.'

The first element then in the mysticism of the 'fan' is '*mystical purification*'; the second, next to be considered, is the '*magical promotion of fertility*.'

Mystical purification might have been, though it apparently never was, effected just as well by the *ptyon* or the *thrinax* as by the *liknon*. A winnow-shovel or fork held over the head would have induced sympathetic magic equally with a winnow-basket. But when we come to the magical induction of fertility, the basket that can *contain* fruits is essential, the fork or shovel that merely tosses and shakes them is not enough. The fact that only the *liknon*, never the *ptyon* or *thrinax*, was mysticized makes us suspect that the mysticism grew up primarily in relation to the symbolism of fertility rather than of purification.

⁵⁴ Helbig, *Cat.* 1168. First published and discussed by Mme. Ersilia Caetani-Lovatelli, *Ant. Mon. Ined.* p. 25 ff. Tav. ii-iv. I have discussed this monument in detail in my

Prolegomena to the Study of Greek Religion Chap. x. p. 547.

⁵⁵ See *Prolegomena*, p. 152.

⁵⁶ *loc. cit.*, see p. 292.

The *liknon*, we have seen (p. 294), served as a cradle. About this simple use a primitive mysticism of the 'sympathetic magic' kind speedily and naturally grew up. The Scholiast on Callimachus⁵⁷ in explaining the *liknon*-cradle of Zeus says: 'in old days they used to put babies to sleep in winnow-baskets as an omen for wealth and fruits.' The child was placed in the winnow-basket or sieve⁵⁸ for luck, and the luck was probably regarded as mutual. The fruitful basket helped the child, the child helped the fruitfulness of the basket.

The placing of the child in the *liknon* at birth was probably rather a casual custom than a rite. But the carrying of the *liknon* full of fruits was a regular part of the ceremonial of marriage. The author of the 'Proverbial

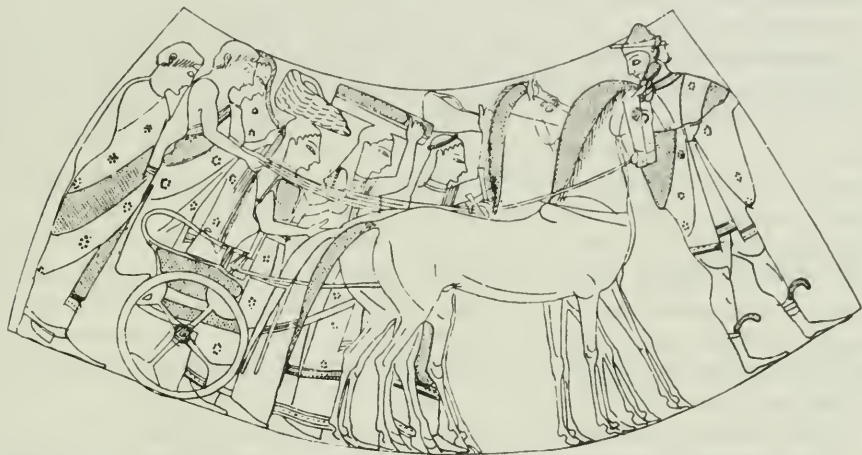


FIG. 13.—CARRYING OF *Likna* AT MARRIAGE PROCESSION.

Sayings of Alexander'⁵⁹ says 'it was the custom at Athens at weddings that a boy, both of whose parents were alive,⁶⁰ should carry a *liknon* full of leaves and thereon pronounce the words "Bad have I fled, better have I found."'

⁵⁷ Schol. ad Callim. *Hymn.* i. 48: ἐν γὰρ λείκνοις τὸ παλαῖον κατεκοίμιζον τὰ βρέφη πλοῦτον καὶ καρποὺς οἰωνιζόμενοι. The Scholiast on Aratus *Phaen.* 268, adds that this was done at birth, τὰ γὰρ βρέφη τὸ πρῶτον γεννώμενα, κ.τ.λ.

⁵⁸ The Scholiast on Callimachus thus defines the *liknon*: λίκνον οὖν τὸ κόσκινον ἢ τὸ κούνιον ἐν ᾧ τὰ παῖδια τιθέασιν. He is probably vague in his conception of a λίκνον. Mr. Haward of King's College, Cambridge, kindly tells me that he learnt from a Cornish farmer that in olden days a corn-sieve served among poor people as a cradle, but whether it was so used 'for luck' or from necessity did not appear. A number of instances of the custom

of carrying a new-born child in a 'corn-sieve' are collected by Maunhardt in his valuable chapter 'Kind und Korn' in his *Mythologische Forschungen*, p. 366.

⁵⁹ Ps. Plut. *Proc. Alex.* xvi. νόμος ἦν Ἀθήνησι ἐν τοῖς γάμοις ἀμφιθαλῇ παῖδα λίκνον βαστάζοντα ἄρτων πλέων εἶτα ἐπιλέγειν Ἐφυγον κακὸν εἶδρον ἄμεινον. And see Zenob. *Prov.* iii. 98. Eustath. ad Od. xii. 357. Suidas, s.v. Ἐφυγον κακόν.

⁶⁰ Hermann (*Lehrb.* iv. 275) states on the authority of Wachsmuth (*Das Alte Griechenland im Neuen*, p. 153) that among the modern Greeks a boy with both parents alive (μουνικοροῦδατος) still carries the bride cakes to the bride.

Zenobius and Eustathius in discussing the custom and the saying add the detail that the boy was crowned with acanthus and acorns. Eustathius and Suidas both explain the custom as symbolic of a transition from rude to civilized life. It is abundantly clear that here again the *liknon* is used as an 'omen for wealth and fruits'; it brings luck to the newly married pair. The loaves of fermented bread (*ἄρτος*) are of course a late element; in primitive days their place would be taken by cakes and earlier by uncooked grain and fruits.

Our literary evidence is late, but fortunately we have monumental evidence that goes back to the sixth century B.C. The design in Fig. 13 is from a black-figured vase now in the British Museum.⁶¹ The reverse of the vase only is published here; the obverse represents Theseus slaying the Minotaur, and has no connection with the present discussion. The scene represented on the reverse is, as Mr. Walters in the Catalogue rightly explains, a wedding procession. A quadriga carries the bridal pair; the bride is veiled; behind the quadriga stands the *parochos*, who strictly speaking ought to be *in* the chariot. The procession is preceded by a bearded man, possibly the *proegetes*. The chariot is accompanied by three women; it is their function that concerns us. The first and third carry vessels that are obviously *likna*. On this point, if the vessel carried by the hindmost woman be compared with the 'fan' in Fig. 7, there can be no shadow of doubt; the shape is the same, the handles and the material, wicker-work. The vessel carried by the front woman is obviously the same as that carried by the hindmost one, but the vase-painter has not troubled to indicate by incised lines the wicker-work material.

The exact significance of the vessel carried by the middle woman must remain uncertain. As Mr. Walters points out, it may be a sieve. Pollux states that the bride carried a sieve. If she did it was, like the *liknon*, a symbol of fertility rather than as Pollux⁶² suggests the 'symbol of her proper work.' As we do not know the exact shape of the Greek sieve, it is perhaps safer to interpret the flat-shaped vessel as merely a basket (*κανοῦν*).

As to the contents of the two *likna* we are left, as in the Hellenistic urn, (Fig. 12) in complete uncertainty. They may hold grain, fruits, or cakes, or leaves, or a mixture of all. Whatever the exact contents, they were symbols of fertility.

It may perhaps be objected that marriage is not a 'mystery.' The Anglican Church no longer includes marriage in its sacraments and from her marriage service all symbolism save that of the ring is now excluded. She still however prays that the married state may be consecrated to an 'excellent mystery' and in this respect follows Greek precedent. The Greeks conceived of mar-

⁶¹ Cat. B. 174. Published by kind permission of Dr. A. S. Murray. The carrying of the *liknon* at the marriage of Eros and Psyche is also depicted on the famous 'Tryphon' gem formerly in the Marlborough collection and now in the Boston Museum of Fine Arts. As its

authenticity is doubted by some competent judges I have decided not to reproduce it here. See my *Prolegomena*, Chap. x. p. 533.

⁶² Poll. On. iii. 37 ὑπερον δὲ ἐξέδουν πρὸ τοῦ θαλάμου ὥσπερ καὶ κόσκινον ἢ παῖς ἔφερε, σημεῖα ὡς εἰκὸς αὐτοῦργίας.

riage as a rite of initiation, and as an initiation-rite it was preceded by elaborate purifications. The word τέλη in its plural form was used of all mysteries, and the singular form τέλος was expressly applied to marriage.⁶³ In any case the carrying of the liknon at marriage was *mystical* in the sense that it was *magical*, an endeavour by sympathetic magic to compel fertility.

The two mysticisms of the *liknon*, *i.e.* purification and the fertility charm, may seem to our modern minds very far asunder. To the primitive Greek mind they are very near together, nay, almost inseparable. Fertility can only be promoted by purification, *i.e.* by the purging away of all evil influences that impede birth and growth. It is also abundantly clear how the purest spiritual mysticism may have its root deep down in the most rudimentary magic. You carry a basket of fruits at marriage that by sympathetic magic you may induce fertility, and the basket of fruits becomes the symbol and sacrament of the whole moral and spiritual field covered by the formula: 'Bad have I fled, better have I found.'

We pass to our third and last enquiry.

3.—*Classed as it is among the instruments of Ceres, how and why did the 'fan' pass into the service of Iacchus?*

First it must be established clearly that the 'fan' was used in the service of Iacchus, and that the words of Virgil are not merely a vague poetical attribution. An epigram in the Anthology records the dedication by a worshipper of his Dionysiac gear. After the enumeration of various instruments, rhombos, cymbal, thyrsos, and the like we have:

καὶ κούφοιο βαρὺν τυπάνου βρόμον, ἥδ' ἐφορηθὲν
πολλάκι μιτροδέτου λίκνον ὑπερθε κόμης.⁶⁴

The carrying of the *liknon* on the head was clearly an ordinary feature in a Dionysiac revel.

Plutarch in his life of Alexander⁶⁵ states that Olympias in her enthusiasm for barbaric orgies introduced as a new element large tame serpents, and these used to creep out of the ivy and out of the mystic likna and twine round the thyrsi and garlands of the women, and frighten the men out of their senses. Here the new element is the serpents; the likna are a regular part of the orgies of Dionysus from very ancient days (ἐκ τοῦ πάνυ παλαιοῦ).

Monumental evidence again confirms the testimony of literature. The

⁶³ Poll. On. iii. 38 καὶ τέλος ὁ γάμος ἐκαλεῖτο καὶ τέλεισι οἱ γεγαμηκότες.

⁶⁴ Anthol. Palat. vi. 165.

⁶⁵ Plut. Vit. Alex. ii. ἡ δὲ Ὀλυμπιάς . . . ὄφεις μεγάλους χειροθήσεις ἐφείλκετο τοῖς θιάσοις,

οἱ πολλάκις ἐκ τοῦ κιττοῦ καὶ τῶν μυστικῶν λίκνων παραναδυόμενοι καὶ περιειλιττόμενοι τοῖς θύρσοις τῶν γυναικῶν καὶ τοῖς στεφάνοις ἐξέπληττον τοὺς ἄνδρας.

design in Fig. 14 is from the fragment of a relief now at Verona.⁶⁶ The two objects depicted, the mask and the liknon, are obviously both of them equally symbols of Dionysus. The liknon here, as in Fig. 6, contains fruits. How inconvenient a basket it is for fruits is shown by the way they fall out over the shallow end.

When used in the service of Dionysus the *liknon* ordinarily contains not only fruits but the symbol of human life and growth, the phallos. Sometimes as in Fig. 6 both phallos and fruits appear, sometimes the phallos only.



FIG. 14.—LIKNON AND DIONYSIAC MASK.

The designs in Figs. 15 and 16 are from the obverse and reverse of a votive disk now in the Fitzwilliam Museum⁶⁷ at Cambridge. How precisely these disks were set up is not quite clear. They are usually perforated as though for suspension, and in Pompeian paintings similar objects appear suspended between columns. In Fig. 6 disks of this kind are seen decorating the circular shrine in which the liknon is set up. If these are really disks they must have been attached at the base to the wall.

⁶⁶ Verona, Museo Lapidario. Schreiber, *Hellen. Rel. ci.*

⁶⁷ Michaelis *Anc. Marbles*, p. 261, Nos. 70 and 71. The designs on this disk have been very indifferently published in the *Museum Disneyanum* Pl. 37, 1 and 2. Figs. 15 and 16 are from drawings kindly made for me by Mrs. Hugh Stewart. The very low and somewhat indistinct character of the reliefs made photo-

graphs impossible. A disk obviously from the same workshop may be seen in the basement of the British Museum (No. 31). It is somewhat more coarsely executed. The design on the obverse represents an old Satyr holding a thyrsos in the left hand and supporting with his left a liknon on his head; on the reverse is Pan with pedum and mask. An altar appears in both scenes.



FIG. 15.—OBERSE OF DISK. (Fitzwilliam Museum.)



FIG. 16.—REVERSE OF DISK. (Fitzwilliam Museum.)

The subject of these disks is frequently Dionysiac. On the obverse of the Cambridge specimen a bearded man with floating drapery approaches an altar. In his right hand he bears an object that I am unable to make out clearly; it is probably a bundle of twigs. Held as it is horizontally it can scarcely be a torch. In his uplifted left the man bears a *liknon*. On the obverse it is not clear what the *liknon* contains. On the reverse an old man carries with both hands a *liknon* that contains a phallos.⁶⁸

On Graeco-Roman sarcophagi⁶⁹ and on late Hellenistic reliefs (*e.g.* Fig. 6) the phallos is openly paraded by worshippers both male and female in Dionysiac revels; but it is important to note that, in actual ritual scenes where a definite religious ceremony of initiation is going on, the *liknon* containing the phallos is always veiled, or, in instances where it has just been unveiled, the worshipper himself is veiled.

The design in Fig. 17 is from the stucco decoration of the Farnesina palace in Rome; the stucco reliefs are now in the Museo delle Terme.⁷⁰ The scene is clearly one of initiation: the boy's head is veiled. The ceremony has some connection with Dionysus, as the candidate holds a thyrsos. A priest is in the act of unveiling the *liknon*. It is of the usual shape, and the priest holds it by one of the handles. The priestess behind the boy is probably touching his head, but the stucco at this point is broken away. Still further to the right a priestess stands near a sacred cista; her right hand is extended and the left holds a timbrel. The whole scene takes place in a precinct marked by two columns and a tree. The design in Fig. 18, from a blue glass amphora in the Museo Civico⁷¹ at Florence, represents an analogous scene. Again we have the veiled boy, but here he bears the *liknon* itself closely veiled upon his head. He carries this time not a regular thyrsos⁷² but a branch of a tree decked with a taenia.

When the *liknon* is veiled it is of course impossible to say with certainty what it contained. It is, however, probable that among the sacra was the phallos. On a 'Campana' relief, figured by Baumeister⁷³ but

⁶⁸ Diodorus (iv. 6) emphasizes the use of the phallos among agriculturists as a prophylactic against the evil eye and says that it is employed *ἐν ταῖς τελεταῖς οὐ μόνον ταῖς Διονυσιακαῖς ἀλλὰ καὶ ταῖς ἄλλαις σχεδὸν ἀπὸ πάντων*.

⁶⁹ The *liknon* occurs very frequently on Graeco-Roman sarcophagi. I noted two instances among the sarcophagi in the Campo Santo at Pisa, and three in the sculptural galleries of the Vatican. The *φαλλοφορία* is clearly shown in a sarcophagus in the entrance hall of the Museum at Naples, of which there is an indifferent drawing in Gerhard's *Antike Bildwerke*. For a complete collection of these sarcophagi we must await the volume of Dionysiac subjects promised in Dr. Roberts' official publication of these monuments.

⁷⁰ Helbig *Führer* 2nd edit., p. 237, No. 1122 (4). The official publication *Monumenti dell' Inst.* suppl. T. 35 (= Lessing and Mau T. 15) gives no idea of the delicate beauty of the original reliefs. Fig. 17 is from a photograph.

⁷¹ E. Castani-Lovatelli. *Antichi Monumenti Illustrati*, Tav. xv. p. 201.

⁷² The scene is clearly one of Dionysiac worship, as is shown by the portion of the design not figured here. Behind the boy on a pedestal is a Herm with thyrsos attached, and behind it a mask with pointed ears.

⁷³ Baumeister, Fig. 496, p. 450. The Kestner Museum at Hanover contains a terracotta plaque with a design almost exactly identical with that figured by Baumeister.

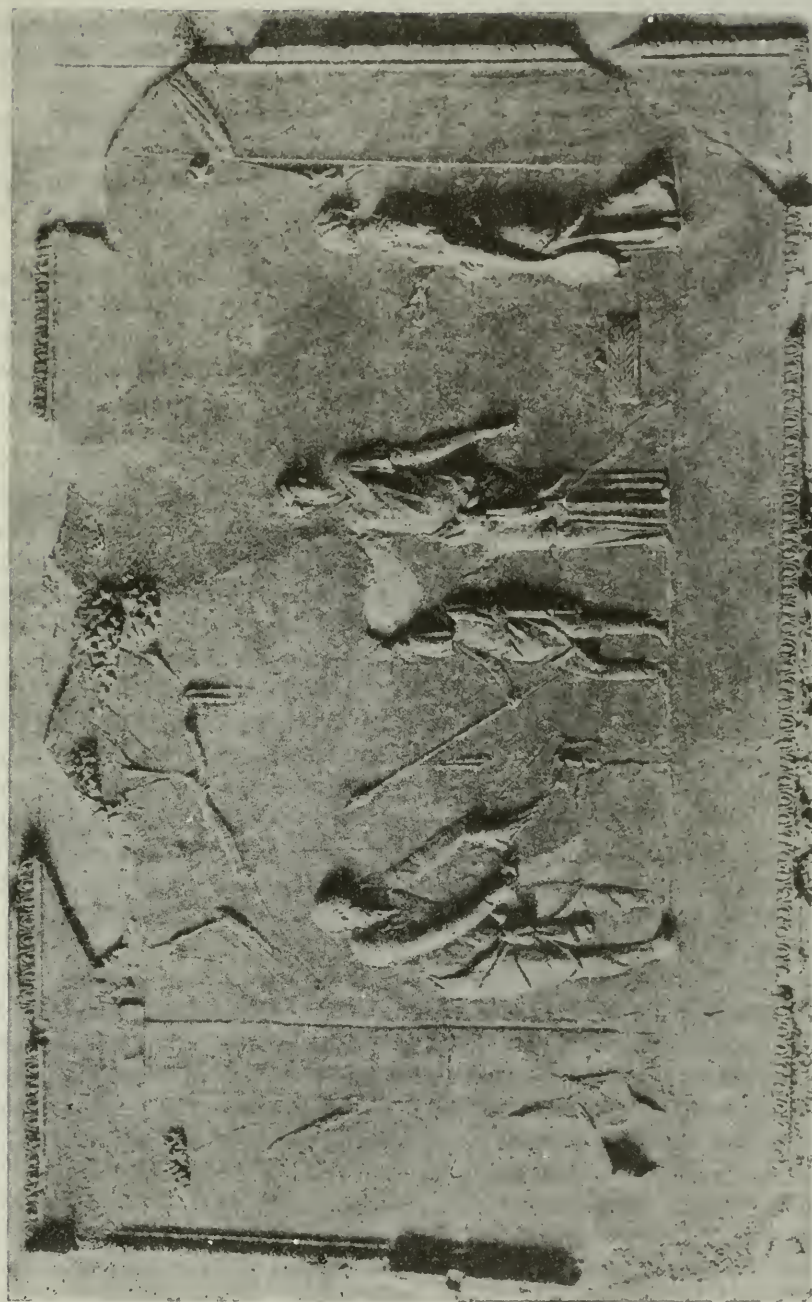


FIG. 17.—STUCCO RELIEF.

not reproduced here, we have a scene of initiation represented with the liknon unveiled. It contains fruits and phallos.* The candidate is still veiled; his head is supported by an attendant-woman, probably a priestess. Behind him a Bacchante strikes her timbrel.



FIG. 18.

So far we have established, from literary and monumental evidence, the facts that the liknon was certainly used in the worship of Dionysus, and that a phallophoria formed a part of Dionysiac mysteries. We can now return to the evidence of Servius.

Servius states that Father Liber was called among the Greeks *Liknites* i.e. 'He-of-the-liknon': the *liknon* in this case being, as he goes on to explain, used as a cradle. Liknites is Dionysus as a babe in a cradle. Fortunately Plutarch confirms this statement. In speaking of the worship of Dionysus at Delphi⁷⁴ he says the Delphians hold that they possess the relics of Dionysus buried by the side of their oracular shrine, and the *Hosioi* make a secret sacrifice in the sacred precinct of Apollo when the *Thyiads* raise up *Liknites*.

How exactly the *Thyiads* 'raised up' or wakened the child-god we do not know; but the design in Fig. 4 already discussed in relation to the cradle-liknon may represent the ritual of the wakening. Some act in a 'mystery' is evidently depicted. The two men holding the liknon seem to emerge hurriedly from behind the curtain; the flaming torches show that the scene takes place at night, the usual time for the mysteries of Dionysus. It may be conjectured that, at a given signal, the birth of the sacred child was announced and the attendants, possibly the *Hosioi* themselves, issued from behind a screen or veil, bearing the new-born child in the liknon.

Servius says that Father Liber was the same person as Osiris, and he further states that Isis carried the limbs of the dismembered Osiris on her head in a sieve. Father Liber, too, was torn to pieces, and he leaves us to infer that in the contents of the mystic fan the dismembered Dionysus is also symbolized. It is worth noting that Plutarch, in the passage already cited⁷⁵ makes substantially the same statement. 'You, Clea,' he says, 'if any one, should know that Osiris is the same as Dionysus, you who are president of the *Thyiads* at Delphi, and were initiated by your father or mother into the rites of Osiris.' The central act of the cult of the Egyptian god was his death, dismemberment, and subsequent resurrection; the central

⁷⁴ Plut. *de Isid. et Osir.* xxxv. 365 a. καὶ θύουσιν οἱ Ὅσιοι θυσίαν, ἀπώρητον ἐν τῷ ἱερῷ τοῦ Ἀπόλλωνος, ὅταν αἱ Θυιάδες ἐγείρωσι τὸν Λικνίτην.

⁷⁵ *loc. cit.* (364 c).

act of the cult of the Cretan and Orphic Zagreus was the dismemberment of a bull who was held to be the vehicle of Zagreus. In this dismemberment the Orphic saw the means of purification and renewal of his own spiritual life. At Delphi the waking of the child *Liknites* was accompanied by a 'secret sacrifice' in which we may conjecture with all but certainty was enacted, whether symbolically or otherwise, the death and dismemberment of the god who was to be born anew as a child in the cradle. In a sense therefore to the mystic the *liknon* which contained the new-born child contained the dismembered god from which he was reborn.

Thus to the old symbolism of the basket of fresh fruits and the winnowing of grain from chaff was added the new, and perhaps Egyptian, mysticism of the *palingenesis*, 'the death unto sin and the new birth unto righteousness.' Charged with such a complex sacramentalism, we cannot wonder that the *liknon* was, as Harpocration said, in the words cited above, 'serviceable for every rite of initiation and every sacrifice.'

The fact that the *liknon* was used in rites of Dionysus has been clearly ascertained. The particular mystic significances that were associated with it in the cult of Dionysus have been in so far as is possible elucidated. There yet remains the cardinal problem: why did the *liknon*, in its origin an instrument for winnowing and always inconvenient as a basket for grapes, come to be the characteristic token of the wine-god?

The answer is very simple and I think convincing. Dionysus before he became the wine-god was the beer-god, the god of a cereal intoxicant.⁷⁶ As the god of a cereal intoxicant he needed the service of the winnowing-fan as much as it was needed by Demeter herself. When the cereal intoxicant, beer, was ousted by the grape intoxicant wine, the fan that had once been a winnower for grain became a basket for fruit. Its mysticism, as has already been seen, contained both elements, the symbolism of purification by winnowing, the symbolism of fertility in the fruit-basket.

The worship of Dionysus, it is now I believe acknowledged on all hands, came to Greece from Thrace, and the national drink of the Thracians was barley-wine (*οἶνος ἀπὸ κριθῆς*). The god took one of his titles, *Bromios*,⁷⁷ from the cereal *bromos*, which lives on in the modern Greek word *βρώμι*. Another of his titles, *Sabazios*, he took from *sabaia* which is Illyrian for beer. When the Emperor Valens was besieging Chalcedon, by way of insult they shouted to him 'Sabaiarius, 'beer-man' or 'brewer.' Ammianus Marcellinus,⁷⁸ in telling the story, added in explanation: 'sabaia is a drink of the poor in Illyricum made of barley or corn turned into a liquid.' The Dalmatian Saint

⁷⁶ The evidence for the use of a cereal intoxicant among northern peoples in primitive days is fully collected by Hehn, *Kulturpflanzen*, 7th edition, pp. 142-153, though he draws of course no conclusions for mythology.

⁷⁷ For a full discussion of the titles *Bromios* and *Sabazios* and the whole question of the

origin and nature of the worship of Dionysus, I must refer to my 'Prolegomena to the Study of Greek Religion,' chapter viii, 'Dionysus,' p. 414.

⁷⁸ Ammian. Marcell. 26, 8, 2: est autem sabaia ex ordeo vel frumento in liquorem conversis panpertinus in Illyrico potus.

Jerome, who must have known the practice of his own country, says in his commentary on Isaiah,⁷⁹ there is a kind of drink made from grain and water, and in the provinces of Dalmatia and Pannonia it was called in the local barbarian speech *sabaium*.⁸⁰ It is this god of a cheap cereal intoxicant, despised by the rich, who brings sleep to the eyes of the slave in the Wasps of Aristophanes.⁸⁰

It was the wine-god, not the beer-god, who came down from Thrace in triumph into Hellas; but though it was the grace and glory of the grape that won all men's hearts, the earlier ruder cereal drink is never quite forgotten, and the memory of it is preserved for ever in the

mystica vannus Iacchi.

JANE E. HARRISON.

⁷⁹ Hieron. *Comm. 7 in Is.* cap. 19: quod genus est potionis ex frugibus aquaque confectum et vulgo in Dalmatiae Pannoniaeque provinciis

gentili barbaroque sermone appellatur *sabaium*.

⁸⁰ Ar. Vesp. 9:

οὐκ, ἀλλ' ὕπνος μ' ἔχει τις ἐκ Σαβαΐλου.

SOME POINTS WITH REGARD TO THE HOMERIC HOUSE.

SOME scholars, in the face of the great difficulties presented by all attempts to reconcile the indications given in Homer with any reconstruction of a house that may correspond to them, have despaired of success to such an extent, that they fall back on the arguments of confusion in the text, or ignorance of what he is trying to describe, on the part of the writer or compiler of the *Odyssey* as we have it. If any apology is needed for a further contribution to the already copious literature on this subject, it must rest on the ground that, before we give up the question in despair, no theory ought to be left untried. The present paper is mainly an attempt to deal with the difficulties presented by *Od.* xxii. 126-177, of which the first twenty-one lines contain nearly all that is important.

- Ὀρσοθύρη δέ τις ἔσκειν ἐνδμήτῳ ἐνὶ τοίχῳ,
 ἀκρότατον δὲ παρ' οὐδὸν ἐσταθέος μεγάροιο
 ἦν ὁδὸς ἐς λαύρην, σανίδες δ' ἔχον εὖ ἀραρυῖαι.
 130 τὴν δ' Ὀδυσσεὺς φράζεσθαι ἀνώγει δῖον ὑφορβὸν
 ἔστεωτ' ἄγχι' αὐτῆς· μία δ' οἷη γίγνεται ἐφορμή.
 τοῖς δ' Ἀγέλεως μετέειπεν, ἔπος πάντεσσι πιφαύσκων·
 “ὦ φίλοι, οὐκ ἂν δὴ τις ἄν' ὀρσοθύρην ἀναβαίῃ
 καὶ εἴποι λαοῖσι, βοῇ δ' ὥκιστα γένοιτο ;
 τῷ κε τάχ' οὗτος ἀνὴρ νῦν ὕστατα τοξάσσαιτο.”
 135 τὸν δ' αὖτε προσέειπε Μελάνθιος, αἰπόλος αἰγῶν·
 “οὐ πῶς ἔστ', Ἀγέλαε διοτρεφές· ἄγχι γὰρ αἰνῶς
 αὐλῆς καλὰ θύρετρα, καὶ ἀργαλέον στόμα λαύρης·
 καὶ χ' εἰς πάντας ἐρύκοι ἀνὴρ, ὅς τ' ἄλκιμος εἴη.
 ἀλλ' ἄγεθ', ὑμῖν τεύχε' ἐνείκω θωρηχθῆναι
 140 ἐκ θαλάμου· ἔνδον γάρ, οἶομαι, οὐδέ πη ἄλλη
 τεύχεα κατθέσθην Ὀδυσσεὺς καὶ φαίδιμος υἱός.”
 ὧς εἰπὼν ἀνέβαινε Μελάνθιος, αἰπόλος αἰγῶν,
 ἐς θαλάμους Ὀδυσῆος, ἀνὰ ῥώγας μεγάροιο.
 ἔνθεν δώδεκα μὲν σάκε' ἔξελε, τόσσα δὲ δοῦρα
 145 καὶ τόσσας κυνέας, χαλκῆρας ἵπποδασειάς·
 βῆ δ' ἵμεναι, μύλα δ' ὥκα φέρων μνηστῆρσιν ἔδωκεν.

Before dealing with the difficulties involved in this passage, it is necessary to have some idea of the general plan of the Homeric house. It is

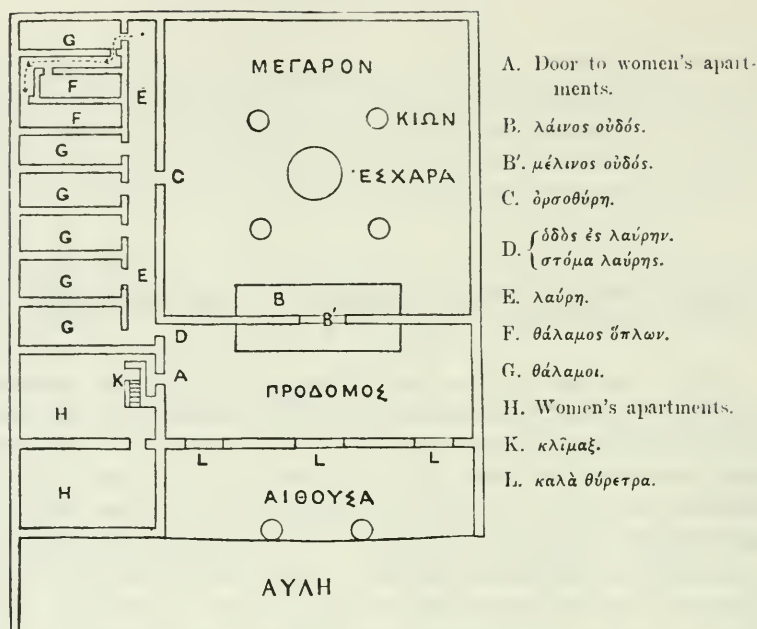


FIG 1.

The above plan is mainly a combination of some of the features of Tiryns and Cnossus; μέγαρον, πρόδομος, and αἴθουσα come from Tiryns, as also does the door A. H represents the position which I believe the women's quarters to have occupied at Tiryns. E, F, G, L, and K come from Cnossus; C and D are found both at Cnossus, in the Hall of the Double-Axes, and in some of the houses at Phylakopi. E is also found in the palace of Phylakopi and at Mycenae. Only part of the house is represented. The men's bedrooms may have occupied a position on the other side of the hall corresponding to F and G, or may have opened on the αὐλή.

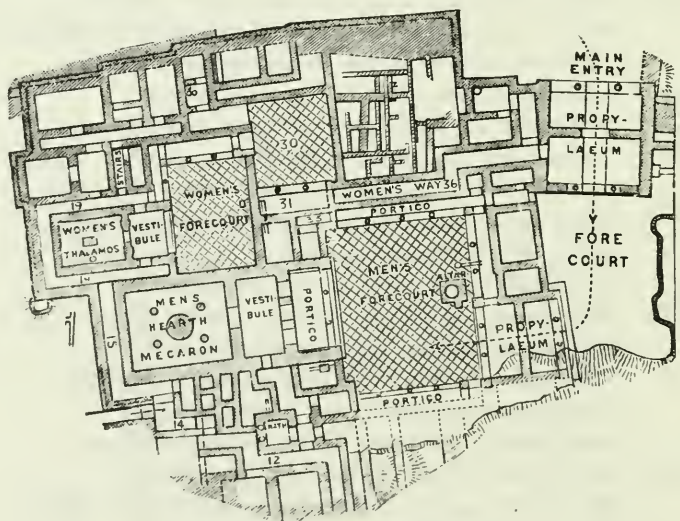


FIG. 2.—THE PALACE AT TIRYNS.
 (From *J.H.S.* xx. p. 131).

(The descriptions 'women's thalamos,' 'women's forecourt,' &c., in the above plan, refer to the old identification, not to that advocated in this paper).

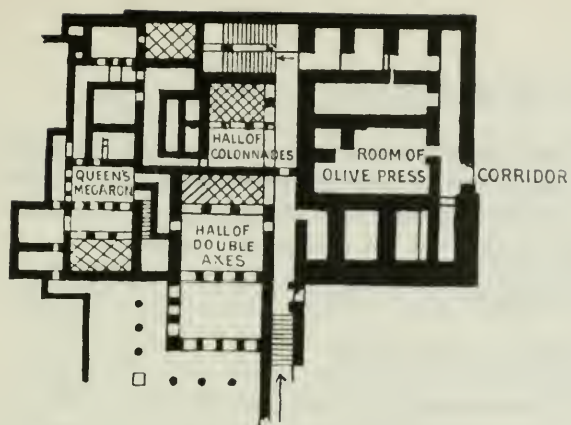


FIG. 3.—CNOSSUS.
(From *B.S.A.* viii. Pl. I.)

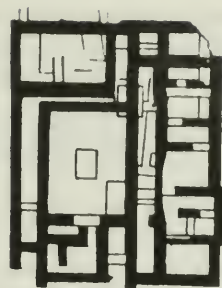


FIG. 6.—PHYLAKOPI.
(From *B.S.A.* v. Pl. I.)

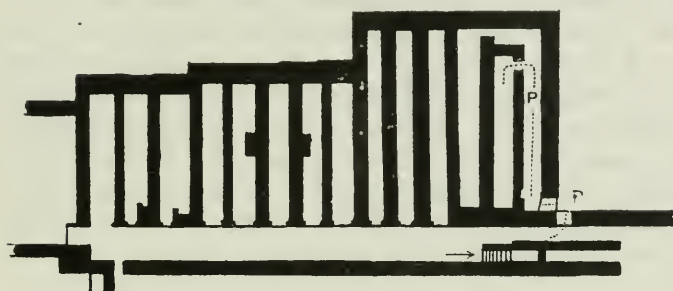


FIG. 4.—CNOSSUS.
(From *B.S.A.* viii. Pl. I.)



FIG. 7.
PHYLAKOPI.
(From
B.S.A. v. Pl. I.)

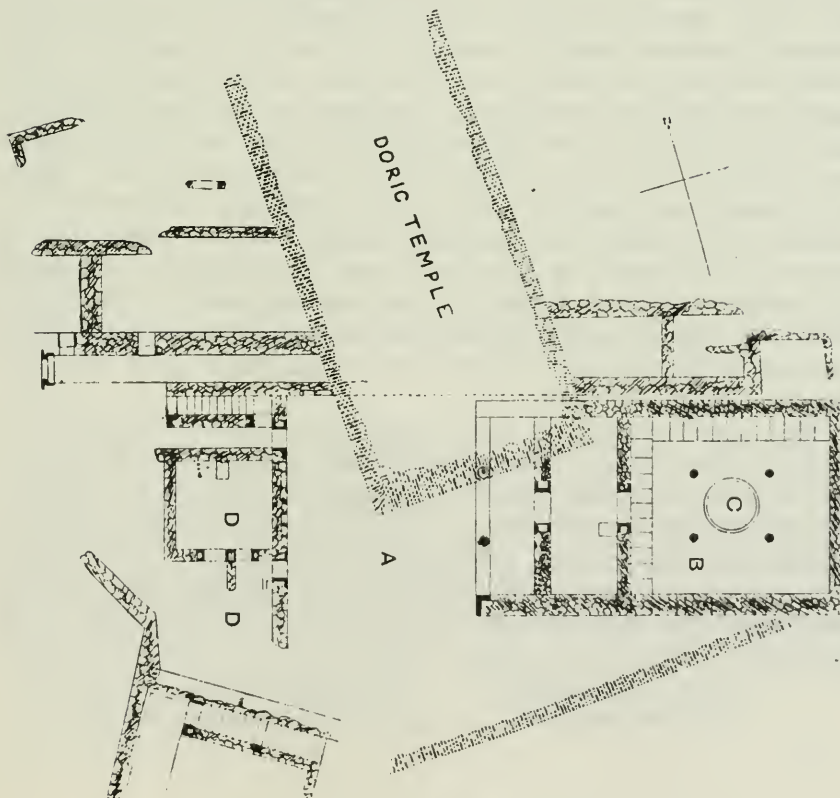


FIG. 5.—MYCENAE.
(From *J.H.S.* xxi. p. 293.)

commonly agreed that on entering the αὐλή or courtyard, you proceeded through a portico into the great hall or μέγαρον. Nearly all further detail becomes controversial, and may be divided into three main questions :

- (i.) The position of the women's quarters.
- (ii.) The existence of a πρόδομος or ante-room as well as an αἴθουσα or portico.
- (iii.) The internal geography of the μέγαρον.

With questions (i.) and (ii.) this paper does not pretend to deal. The old view, which has been set forth most clearly by Prof. Jebb, was that the women's quarters of the Homeric palace lay behind the men's μέγαρον and communicated with it by a door. This contention was based both on the interpretation of the *Odyssey* and on the traditional form of the later Hellenic house. Mr. J. L. Myres, however,¹ has already in this *Journal* put forward a view based on the actual evidence of excavation, which strikes at one foundation of the old theory by providing a more adequate explanation of the Homeric story, while, in a more recent number² Prof. Ernest Gardner has thrown grave doubt on the traditional form of the Hellenic house. None of the houses excavated at Delos appears to conform to the plan of Prof. Jebb, and it seems therefore unnecessary here to consider any further arguments against this theory.

The hypothesis, however, on which this paper is based is not exactly the form of house upheld by Mr. Myres, that is to say, the plan of the palace at Tiryns. He maintains that the women's quarters of the Homeric house existed in a separate building connected with the men's apartments only by a somewhat tortuous passage. It is far from certain that the women's quarters at Tiryns were in the position indicated by Mr. Myres, although the excavations at Mycenae and Phaestus certainly point to their occasionally being so placed, while in no case can such a house, I think, have been the scene of the Homeric story : in the palace of Odysseus communication between the apartments of the men and women involved far less time and trouble than it could have done at Tiryns. Accordingly the general plan submitted in this paper is based on a view suggested by Prof. Ernest Gardner, viz. that the women's quarters in the Homeric palace were contained in the same building as the men's, and opened, like theirs, directly on πρόδομος, αἴθουσα, or αὐλή.

The second question is one of less importance and interest. The passages³ quoted by Mr. Myres combined with the evidence of excavation point decidedly to the existence of both πρόδομος and αἴθουσα.

The most difficult questions in connection with the Homeric house are concerned with the internal geography of the μέγαρον. Of the chief difficulties that arise, one, viz. the position of the two οὐδοί, has been satisfactorily answered by Mr. Myres,⁴ whose view I have adopted, but on the

¹ *J.H.S.* vol. xx. p. 128.

² *J.H.S.* vol. xxi. p. 293.

³ *J.H.S.* vol. xx. p. 144.

⁴ *J.H.S.* vol. xx. p. 136.

others, viz. the nature and position of the ὀρσοθύρη and the ῥῶγες, together with the interpretation of the whole passage beginning at *Od.* xxii. 126, it still seems necessary for fresh light to be thrown.

Turning to this passage we find Odysseus standing on the great threshold with helmet, shield, and two spears, which Telemachus has fetched from the θάλαμος ὅπλων together with three other equipments for himself, Eumaens, and Philoetius. The bow shooting is over, and the three chief suitors, Antinous, Eurymachus, and Amphinomus, are dead. For a moment there is a lull in the conflict; Odysseus and his party make fresh arrangements for renewing the fight, and the terror-stricken suitors have time to gather their wits together.

In the context we find mention of an ὀρσοθύρη,⁵ whatever that may be, and of a ὁδὸς εἰς λαύρην or way into the passage. Mr. Myres thought that these two terms referred to one means of exit from the hall, but here Prof. Jebb seems to be right in separating them. In my plan C is the ὀρσοθύρη, and D the ὁδὸς εἰς λαύρην. This is different from the arrangement of Prof. Jebb, who puts both the ὀρσοθύρη and the ὁδὸς in the hall itself—a plan which I venture to think is fatal to the interpretation of the passage, and with which I shall deal later. There must have been some need in the Homeric house of rooms corresponding to pantries, and thus, both for these, and for serving purposes in general, a side door in the hall becomes natural and almost essential. It is true that this is a departure from the plan of Tiryns, as far as we can judge from the extant remains, but then neither need we suppose that all Homeric houses were alike, nor that the writer is basing his description on the actual plan of Tiryns. The story of the *Odyssey* cannot be worked out accurately in a plan identical with Tiryns, but the differences are not essential, and in this particular case the new discoveries at Cnossus⁶ give ample evidence of the use of such a side door in the Hall of the Double-Axes. This side door then is the ὀρσοθύρη, about half way down the side of the hall, as will be shewn later; it does not, however, enter directly the rooms marked G but a passage or λαύρη as at Cnossus. At Tiryns also there is a λαύρη, but it has a more tortuous course. Now there would obviously be need of another means of access to these chambers off the λαύρη, instead of making the μέγαρον the only approach, and for evidence of this it is only necessary to consult some of the plans shewn on p. 327,

⁵ Mr. Myres seems to be right in explaining ὀρσοθύρη as a trap door of some kind. Other compounds of ὀρσο- and ὀρσι- seem to be active in meaning, but doubtless the passive sense is also possible. Prof. Ernest Gardner has suggested to me that the ὀρσοθύρη may be a species of serving-hatch, a suggestion which fits in well with the theory of this paper as it explains why a single man might slip through while a combined rush would be practically impossible.

⁶ A glance at the plan of the gallery of the treasure-chambers on the west side of the palace

of Cnossus, which is reproduced in Fig. 4, shews how admirably that will suit the Homeric narrative. Here we have an excellent example of the λαύρη with treasure-chambers and store-rooms leading from it and a passage P, which may well correspond to ῥῶγες if we accept the derivation of that word from ῥήγνυμι, and take its meaning to be a crooked winding passage. Compare also the 'dog's-leg' passage leading from the Hall of the Double-Axes to the Queen's μέγαρον.

notably those of Cnossus and Phylakopi. In the house of Odysseus then this *λαύρη* ran along the side of the hall, and opened into the *πρόδομος* by the door marked D. This door D is far more naturally the *ὁδὸς ἐς λαύρην* than any door that can be imagined elsewhere. We have a description of its position as *ἀκρότατον παρ' οὐδόν*. The *οὐδός* of stone stretched well beyond the actual door. It afforded an excellent platform for Odysseus to shoot from, it was probably the scene of the fight with Irus, and in *Od.* iv. 715 it seems to be applied to a large portion of the floor: it was probably the term used for the stone paving which in some cases, as at Tiryns, covers the whole of a court or portico. Thus to describe the *ὁδὸς ἐς λαύρην* as *ἀκρότατον παρ' οὐδόν* is both simple and sufficient: there is no need for the strained interpretations which have been given of *οὐδός* in this passage as 'plinth' or 'topmost step.'

We must now follow the movements of Eumaeus. It is usually supposed that he was sent to guard the *ὀρσοθύρη*, but there are ample reasons why this should not have been the case.

(1) He is not told to go through it into the passage but to stand near it, *παρ' αὐτήν*. Now there is no conceivable position in which he could stand near it in the hall, where the following remark would be justified:

καὶ χ' εἰς πάντας ἐρύκοι ἀνὴρ, ὅς τ' ἄλκιμος εἴη.

There is no more ease in defending a door from the front of it than there is in fighting anywhere else with your back to the wall, nor have we any reason for supposing that Eumaeus was capable of defending himself from the suitors in such a position, where he could be attacked from three sides at once. He is an old man and obviously diffident of his strength (*cp. Od.* xxii. 167 ἢ μιν ἀποκτείνω, αἶ κε κρείσσων γε γένωμαι). On the other hand, if you are defending a door from behind it, so that your opponents have to come in single file through the door in order to attack you, you obviously have a great advantage. Eumaeus would be in a very favourable position, and also a very useful one, as will soon be seen, if posted outside D. An objection may arise from the traditional view that the *ὀρσοθύρη* was up a flight of steps. It may be urged that, at the top of such a flight of steps Eumaeus might well be considered in an unassailable position. But (i) there is no evidence for supposing that the *ὀρσοθύρη* was up a flight of steps. The supposition rests solely on the word *ἀνέβαινε*, which is used of egress through the *ὀρσοθύρη*, and Mr. Myres has shown by⁷ arguments, which need not here be dealt with, that *ἀνά* is used of all progress out of the hall, and towards the court, and *κατά* of progress into it. It would be quite needless to climb up steps in order to descend them again to the passage, and the ascent to a conjectural upper *λαύρη* fails to explain the actual existence of a lower one. (ii.) Even if there were steps Eumaeus is not directed to climb up to the *ὀρσοθύρη* but to stand near it. (iii.) If he stood at the top of a flight of steps, he would be cut off from Odysseus, and not so accessible as the narrative shews he was.

⁷ *J.H.S.* vol. xx p. 141.

This third objection is particularly valid, because Odysseus had no more arrows, and could not leave the door to go and help Eumaeus, who would be wholly isolated, while outside D he would be quite safe, readily accessible, and just as useful as at C, except in preventing the suitors from getting to the *θάλαμος ὄπλων*, which Odysseus, however, believed to be locked, or had forgotten, as appears in the sequel.

(2) The second reason for maintaining that Eumaeus was not told off to guard the *ὀρσοθύρη* is that, if he was, the remark of Agelaus in l. 132 becomes perfectly unintelligible. He proposes that someone should go through the *ὀρσοθύρη*, down the *λαύρη*, out into the *αὐλή*, and thence again to the town to bring help. He was in full view of the *ὀρσοθύρη*, and must obviously have supposed it unguarded. D, the *ὁδὸς ἐς λαύρην*, was out of his sight.

Eumaeus then was sent to guard not the *ὀρσοθύρη*, but the *ὁδὸς ἐς λαύρην*. This Prof. Jebb recognises, supposing that the *ὀρσοθύρη* was throughout in the possession of the suitors, but he puts the *ὁδὸς ἐς λαύρην* inside the hall, so making a^s fourth entrance to the *μέγαρον*, a fact sufficiently improbable in itself for a room in which a large number of persons were to be trapped and slain. There seems to be no good reason why there should be a second side door in the hall as well as the *ὀρσοθύρη*. If it existed at all, it would presumably be, as described, at the edge of the threshold, *i.e.* in one of the corners behind Odysseus. This would be a useless post for Eumaeus, as it was well within reach of Odysseus, and the same arguments that may be brought against Eumaeus' position by the *ὀρσοθύρη* apply equally well to his position at such a *ὁδὸς ἐς λαύρην*, or indeed any position inside the hall. It is a justifiable inference from the context that he was not actually in sight of the suitors at all. He and Philoetius and Telemachus visit the *θάλαμος ὄπλων* several times, and we can hardly suppose that they did so in full view of the suitors, who had only to go through the *ὀρσοθύρη* to intercept them in the passage. There seems to have been a route to the *θάλαμος* which was out of sight, and this would obviously be the way up the *λαύρη*. The objection which may be raised, that it seems curious to get rid of Eumaeus in a place quite out of the battle instead of making him fight is answered by the fact that (i.) he was an old man and presumably not of much real assistance, (ii.) that it was quite essential for somebody to guard the passage way in case some such plan as that of Agelaus had been followed, and (iii.) that, when matters have actually come to a hand-to-hand tussle, he does come in with the others and takes part in the slaughter.

We must now turn to Melanthius and his doings, which become quite explicable by this view. Agelaus has proposed that someone should go through the *ὀρσοθύρη*, and escape from the house to the town. To this Melanthius objects that it is not possible for two reasons: 'the fair doors of the court are very near, and ⁹ grievous is the exit from the passage.' These fair doors

^s The great door, the *ὀρσοθύρη*, the *ὁδὸς ἐς λαύρην*, and the door communicating, in the old plan, with the women's apartments.

⁹ Mr. Myres suggests a connection between *ἀργαλέον* and the Romic *ἀργά* 'hard to get to' popularly used for 'distant.'

are probably the three doors of the *πρόδομος*, which are shown at Tiryns, as Mr. Myres has pointed out, to have been at any rate of great size and weight, and which opened through the *αἶθουσα* on to the court. These were very near in the sense that they were just behind Odysseus and his adherents, and egress to the court would have to be made through them. Anybody attempting to escape through them, even if he passed Eumaeus, would be sure to be noticed, and attacked by Telemachus or Philoetius. Moreover the exit of the passage is a place of great danger, and one man could easily guard it, as in fact Eumaeus was doing. This *στόμα λαύρης* is D, as Mr. Myres also pointed out,—it is quite natural that it should be regarded from one point of view as a way into the passage, *ὁδὸς ἐς λαύρην*, and from the other as a way out of it, *στόμα λαύρης*. The phrase applies far more naturally to D than to C, and the answer of Melanthius, again ignoring the presence of any danger at the *ὀρσοθύρη*, merely points out the difficulties that would meet anybody who had already reached the passage. The phrase *μία δ' οἷη γίγνεται ἐφορμή* means that only one man could attack Eumaeus at a time, i.e. through the door itself. In no case could the phrase apply to Eumaeus if stationed inside the hall at a *ὁδὸς ἐς λαύρην* like that of Prof. Jebb, for under these circumstances there would be two entrances to the passage, and two methods of attacking him, i.e., either from the hall or from the passage. We may also notice here one argument of Mr. Myres' in favour of his theory of an upstairs *λαύρη*. He says Agelaus proposed that some one should go up through the *ὀρσοθύρη* on to the roof, and thence warn the people; but if this was possible Melanthius could easily have done so when he actually did get out of the hall. Nor will this interpretation fit in at all with the explanation given above of the *καλὰ θύρετρα* and the *ἀργαλέον στόμα λαύρης*.

So far then we may claim to have established that the *ὀρσοθύρη* was a side door in the hall leading out into the passage about half way up the side, so that, while the suitors had to go up (*ἀνὰ*) the hall to get there, it was still out of reach of Odysseus and his party; that the passage into which it led had an exit into the *πρόδομος*, and also various rooms and galleries leading out of it, and that, as Mr. Myres has lately suggested to me, it may well be compared with the passage along the west side of the palace of Cnossus out of which open the treasure-chambers and store-rooms for wine, etc. Doubtless it was off this passage that the *θάλαμος ὅπλων* opened, represented in the plan by F, a position agreeing well with the description *μυχὸς δόμοιο*.

We come now therefore to Melanthius' movements and the *ῥῶγες μεγάροιο*. The most reasonable explanation of his actions is, I think, the following. Agelaus had proposed that someone should slip out of the *ὀρσοθύρη* and warn the people. To this Melanthius replies by an alternative: 'No, that will not be safe, but, as you mention the *ὀρσοθύρη*, I will make use of it to get you arms from the treasury, and then you can force your own way out.' Accordingly he slips through the *ὀρσοθύρη*, which is unguarded, up the *λαύρη* into the *θάλαμος*, gets the arms, and returns in haste. This view interprets *ῥῶγες*, and indeed all Melanthius' movements, in the same way as Prof. Jebb, on the analogy of the modern Greek *ῥοῦγα* = 'narrow passages.' The

derivation from *ρήγνυμι* can be well understood by glancing at the tortuous entrance to F. The term may well have been applied to any winding broken passage. In this view as in all others there are difficulties to be met. It may be asked how such a passage can be described as *ῥῶγες μεγάροιο* when it is not actually in the hall at all. The answer to this is that *μέγαρον* is not confined in meaning to the great hall of the palace. It is¹⁰ used of the women's quarters, and also it is¹¹ used of the house as a whole; the line which occurs twice in iv. 625 and xvii. 168 speaks of the *αὐλή* as *προπάροιθε μεγάρου*, where *μέγαρον* seems to be used of the whole block of buildings comprising the palace, and it is in this latter sense that it seems to be used here.

Exception may also be taken to the use of *ἀνά* in this passage, which is generally used of egress from the *μέγαρον* towards the *αὐλή*, while in this case the *θάλαμος* is in the *μυχὸς δόμοιο*, but *ἀνά* may well be used of all motion away from the hall and the *ἐστία* which was the centre of domestic life.

With regard to the *θάλαμος* we know that one *θάλαμος*, viz., that in which the bow was kept, was upstairs, but it is improbable that the one visited by Melanthius and Telemachus was the same. Access to it is easy and speedy, cf. xxii. 112 *βῆ δὲ φέρων, μάλα δ' ὤκα φίλον πατέρ' εἰσαφίκανε* and a similar line in xxii. 146, while, whenever Penelope mounts the *κλῖμαξ*, the fact is mentioned. Mycenaean palaces seem to have abounded in treasure-chambers.

Thus the movements of Melanthius are easily explained. We need only glance at the alternative suggestions for the meaning of *ῥῶγες*. Mr. Myres seems to favour the old view, supported by the drawings of Dr. Middleton, that the *ῥῶγες* referred to the clerestory of the hall and that Melanthius climbed up one of the pillars, and so out. This view, as Prof. Jebb points out, seems impossible. It is inconceivable that Melanthius should have climbed one of these pillars in full view of his antagonists, and returned with twelve sets of arms without being noticed by anybody on his first, and only by Eumaeus on his second, attempt. (Eumaeus could not of course have seen him performing this feat were he stationed outside D, however many times he did it.) More plausible is the view that would interpret *ῥῶγες* as windows or slits in the wall, or perhaps openings on the analogy of the Cretan light wells, but if there were windows, it would be natural to suppose that more of the suitors would have tried to escape by them, while the passage up any light well that I have seen would not only be open to the same objections as the climbing of the pillars to the clerestory, but also be a matter of considerable difficulty. On the other hand, if the *ὀρσοθύρη* were on the ground floor, it would be comparatively simple for Melanthius to slip through it unnoticed, though even here on his second attempt he was observed by Eumaeus from his post outside D. Finally it may be asked why did not the suitors make a rush for the *ὀρσοθύρη*, and get out by that means? But obviously their numbers would have a

¹⁰ Cf. Od. xviii. 185 and 198, and xix. 60.

¹¹ Cf. Od. i. 276, xv. 128, and xx. 343.

better chance in a fight in the great hall than in narrow passages, where one man might hold his post against twenty. In the hall they might overwhelm Odysseus, in the passages they would be slain like sheep. We may observe that when it is a question of one man slipping away unnoticed, Medon does deliberate whether he should escape through the *ὀρσοθύρη* to the *αὐλή* or throw himself on the mercy of Odysseus in the hall.

No further points arise in regard to the house, so far as I can see, which present any inconsistency with the views discussed above, which I trust, therefore, will be allowed to have cleared up some of the difficulties of the Homeric narrative.

GUY DICKINS.

NOTE.

List of passages in Odyssey referring to the Homeric House.

I. 102-108, 119, 120, 125-131, 144, 145, 253-256, 28-335, 360-364, 425-427. II. 337-345. III. 396-408. IV. 20-22, 39-51, 120-122, 296-305, 625-627, 675-680, 715-719, 758-761. VI. 50-55. VII. 81-90, 95-98, 133-141, 334-347. VIII. 456-458. XV. 4-5. XVI. 283-286, 342-344, 413-416. XVII. 28-37, 96, 97, 167-169, 264-268, 324, 325, 336-341, 492, 493, 507-511, 560-571. XVIII. 32, 33, 100-103, 187, 188, 196-198. XIX. 14, 15, 59, 60. XX. 1, 6-8, 91-97, 257-259, 387-389. XXI. 5-12, 148-150, 188-190, 242-244, 376-392. XXII. 1-4, 21-25, 105-115, 126-204, 239, 240, 257-259, 330-337, 378-380, 393-190, 433, 434, 457-460, 495-501. XXIII. 85-92, 293, 294.

RECENT EXCAVATIONS IN ASIA MINOR.

PERGAMUM, EPHESUS, AND MILETUS.

THIS paper does not profess to give anything more than a brief account of the important results obtained by the German and Austrian excavators up to the time of my visit to these sites in June. I should like in particular to direct the attention of English archaeologists to Western Asia Minor as a field of research that is practically untouched, especially as regards remains of the Hellenistic period. Brilliant results await the scientific explorer of important sites such as Sardis, Tralles, Laodicea, and Apamea, and all these are extremely easy of access. The English traveller cannot help feeling ashamed of English archaeology when he sees the unintelligible mass of ruins and brushwood that covers the site of the Artemisium at Ephesus.

My warmest thanks are due to Drs. Dörpfeld, Benndorf, Wiegand, and Heberdey for permission to use their plans and photographs: I am also under great obligations to Dr. von Schneider for illustrations of the Ephesus sculptures. I greatly regret that an accident at Ephesus, which rendered me lame for the best part of a week, made a closer personal examination of that site and Miletus impossible.

Pergamum.

Since the close of Dr. Humann's and Dr. Conze's famous excavations on the acropolis at Pergamum, Dr. Dörpfeld¹ has been engaged in the name of the German Archaeological Institute in clearing the Agora of the lower city and the part about the southern entrance to it where the great road to the Acropolis begins to climb the hill. Besides this Dr. Winnefeld has resumed the search for fragments of the altar and intends to excavate the terrace between the site of the altar and the shrine of Athena Nikephoros above, and afterwards to explore the lower terrace to the east of the road just before the great entrance gate to the Acropolis proper.

Fortunately for the excavators the modern town of Bergama lies on the site of the Roman town in the semicircular hollow between the Asclepium

¹ *Ath. Mitt.*, 1902, p. 1 *seqq.*

hill, the Acropolis and the lower hill to the east, and it only just encroaches on the fringe of the Hellenistic city by the great south gate. The ancient approach to the great south gate is obscured by modern houses, but in all probability the roadway zigzagged up the gentle slope, while a shorter footpath led straight up. At a point just between the Greek and Armenian cemeteries the road enters the wall of Eumenes II. To the right (to threaten the shieldless side of the enemy?) a great square tower (A) stands out, and on the left was a smaller tower (B) to guard the return of the wall as it ran north-west. Passing the great tower the roadway entered a great square paved court and then immediately turned out of it again to the left, resuming its somewhat tortuous course upwards: reference to the plan will explain the position (Fig. 1). From the small tower (B) that guards the return of the wall, a short wall runs across and bonds with the west wall of the court just between the two gates. Just above this wall the pavement of an older roadway is visible: this was clearly the course of the great road till the enlargement of the enceinte of the city undertaken by Eumenes II., for all the water pipes and sewers run straight down the hill at the side of this older pavement. The gate court itself was further defended by a yet larger tower (C) that stood out at the south-east angle. The south wall of the court between this tower (C) and tower A is pierced by a small gate, obviously the entrance for a footpath leading up the hill. This small gate, however, was walled up later in the Greek period, for the masonry is Greek: and not only was this gate walled up, but also a strong outside wall of the same thickness as the wall of the court was built between towers A and C. Further against the east side of the court a series of five whole and two engaged octagonal pillars supported a plain Doric entablature. Dr. Dörpfeld conjectures from traces of drain and water pipes that this roofed in a drinking fountain.

The great road runs beyond this gate for a short distance north-west and then turns north-east, always ascending. Both here and higher up the construction of this road calls for remark: it is regularly paved with large uneven blocks of trachyte, while underneath this pavement run sometimes as many as six water pipes, and all along there is at the side a large square-built sewer. The sight of this magnificent road always steadily ascending to the Acropolis is one of the most imposing monuments of the greatness of Pergamum. Shortly after the great road turns north-east it passes on the left a large terrace cut westwards into the slope of the hill. This is the 'Second Agora.' It is entered by a small flight of steps at the north-east corner, and consists of a large open oblong court paved with flat stone slabs and surrounded by a two-storied colonnade fronting rows of shops. The shops on the east are in good condition and have been roofed in to make a museum for small objects not worth removal. The whole agora is roughly eighty-eight metres long by fifty-five broad. Owing to the formation of the ground, the shops at the north-east corner are on a higher level and approached by a stone staircase: near by is the entrance to an underground water channel which comes down from a rock-cut cistern in the hill above. On the south side the shops are on a lower level and back on to the supporting wall of the

colonnade, and so face outwards to another colonnade that presumably fronted a street running west from the great road. On the east the row of

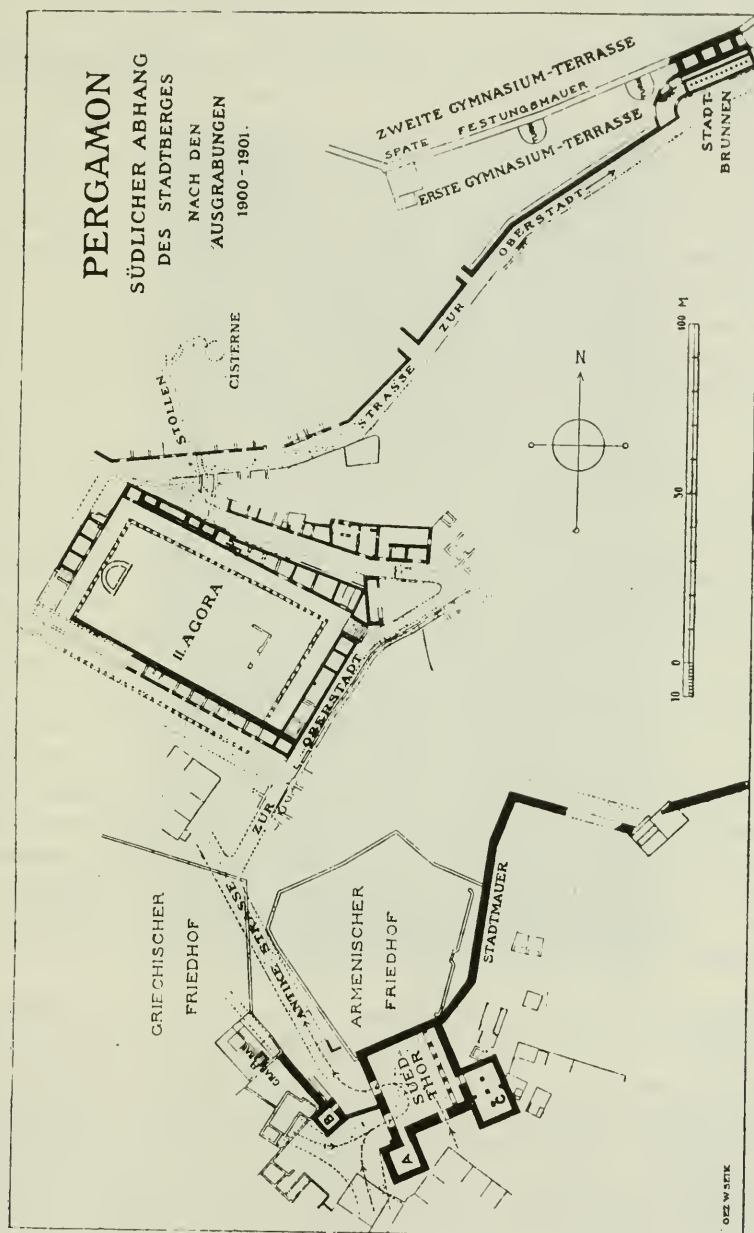


FIG. 1. (After W. Dörpfeld, *Att. Mitt.* 1902, pl. 1.)

shops is on a lower level and fronts the great street, but backs on to a supporting wall partly built of polygonal masonry, which is some distance in

front of the colonnade surrounding the court. But on both these sides there was clearly a second storey on the same level as the court: perhaps on the south side there were no shops on the second storey but only an open double colonnade. The centre of the court was in later times the site of an early Christian Church.

At the north-east corner of the agora a road turns off eastwards along the slope of the hill to the east gate which has been examined by Dr. Kolbe. It lies on the line of the modern road, and is of a similar type to the gates on the north-west (see below). From the north-east corner of the Agora the great road, still ascending, runs above it to the west, then at the north-west corner turns sharp round to the right and runs up close under the late Roman fortification wall (see plan). Below the square tower of this wall, a great trench has been cut along the line of a narrow street which runs up the hill somewhat to the south-west of the corner of the great supporting wall of the gymnasium terrace above. Further along on the left of the great road and under the second round tower of the later fortification wall is the city fountain. This backs on to the wall of the terrace above, and consists of a basin (21×3·15m.) with twelve columns inside to support the roof. The upper part of it seems to have been of marble. On the same level as this fountain and on a narrow terrace running west above the level of the great road are remains of a gymnasium τὸ γυμνάσιον τῶν παίδων. The existing remains are chiefly those of a narrow Doric Stoa built against the buttresses of the supporting wall of the second terrace. Access to this second terrace is obtained by a vaulted staircase fronted by semi-circular steps, that leads up northwards just between the fountain and the gymnasium (Fig. 2). On this second terrace towards the south-east stood a Corinthian Temple of the late Hellenistic period: it was apparently prostyle-tetrastyle and was about 14m. long by 7 wide. It seems to have been built of marble on limestone foundations. Also on this terrace are remains of partially excavated rooms and a stoa backing on to the retaining wall of the third gymnasium terrace. On this third terrace lie the imposing remains of the great Corinthian Colonnade of the γυμνάσιον τῶν νεῶν already previously identified by Humann. The noble proportions of this gymnasium are astonishing: and Dr. Dörpfeld's future excavations here should produce results of great importance.

Further Dr. Thiersch has examined the two gates on the north-west of the Wall of Eumenes II. On this side the city wall runs down the hill from the sharp point below the Temple of Faustina to another precipitous point (just on the modern road) where it turns sharply south-east down the Selinus valley. The upper north-west gate lies about half way down, it is placed obliquely at the inside of an angle in the wall so that the left of the entrance is well guarded by the wall and the tower at the corner, while the right of the entrance is still further protected by a square tower. The lower north-west gate lies at the precipitous point on the modern road. The situation is somewhat similar: the gate lies behind a tower which thus guards the entrance from the left, while from the right it is covered by the

short stretch of wall between the gate and the great tower that stands out at the return of the wall.

Of other discoveries the most important are the famous 'Astynomi' inscription, and another dealing with moneychangers and the supply of small change which recalls vividly to the traveller the vagaries of Turkish currency. Sculpture is well represented by the magnificent Alexandroid head published by Dr. Cenze (*Ant. Denk.* II. pl. 48. p. 9) and the warrior



FIG. 2.—PERGAMUM. VAULTED ENTRANCE TO THE SECOND GYMNASIUM-TERRACE.

Below on the right one end of the city-fountain.

torso whose muscular development is most strikingly modelled (Thiersch. *Ath. Mitt.* 1902, p. 152). The 'New fragment of the Dedication Inscription of the great Altar' mentioned in the *Philologische Wochenschrift* of 27th Dec., 1902 (v. *Cl. Rev.* Feb. 1903, p. 90) and said to date the altar to the reign of Attalus II is more or less of a myth. What has been found is merely a fragment of an inscription previously known as belonging to Attalus II's reign (*Inscrift. v. Perg.* No. 216) and apparently from a dedication

of sculpture of that king, but which Dr. Dörpfeld has suggested may have belonged to the great altar and been placed underneath the colonnade (not over it, as the true Dedication Inscription was). The attribution however rests on no sure grounds and is after all only a guess, and a guess that I believe to be incorrect. Dr. Winnefeld's coming excavations on the terrace between the altar and the shrine of Athena will probably throw more light on this and several other points.

Ephesus.

The Austrian excavations at Ephesus (Fig. 3) which have been so ably and scientifically carried on since 1895 by Drs. Benndorf and Heberdey, with the assistance of Prof. George Niemann and Dr. Wilberg as architects, have not

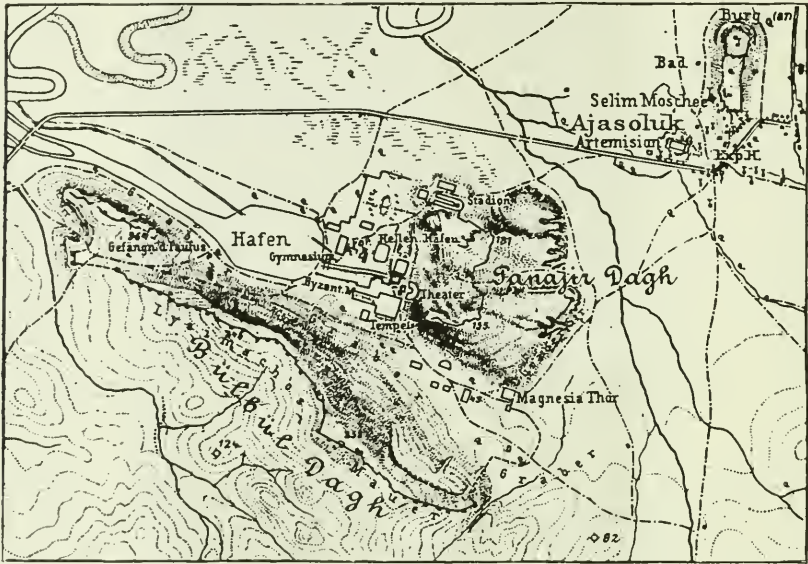


FIG. 3.—EPHESUS. (After Capt. A. Schindler.)

only revealed the stage of the theatre, the Roman forum, and the quay, but have cleared up several important topographical points.

The theatre, one of the largest in Asia Minor, is a building of Roman construction over the theatre built by Lysimachus. It contains sixty-six rows of seats divided by two diazomata; and by twelve rows of steps into eleven cunei. The seats are of limestone covered with marble. They are reached by two vaulted entrances from the west which lead to the first and second diazomata; there are also other vaulted entrances from the north and south to the second diazoma. On the walls of one of these entrances is an interesting inscription cut by the workmen, which helps to date the building. The seats do not reach to the level of the orchestra, which is separated from them by a wall 1.75 m.

high. Inside this is a balustrade with statue bases. The stage buildings consist principally of a central corridor, which had a second storey with a richly decorated marble front and is entered by three doors. The old central corridor can be traced and was broader and contained six or eight rooms. Before the skene three rows of marble pillars (the two back rows rounded, the front one square) with curious almost proto-Ionic capitals support the logeion, the ends of which run into the seats and so cut off a third of the orchestra. The logeion is approached from the north and south by ramps from outside, from the orchestra at each end and in the centre by steps. Between the front row of pillars below the logeion and the front wall is the space for the curtain to drop. Under the logeion in the centre is a wide entrance from the orchestra to the rooms under the skene. Below the present level of the orchestra can be seen the circular drain of the old orchestra, and also traces of its paving, which shews that in the Greek period the seats extended right down to it.

Against the supporting wall of the skene and towards its northern end and fronting the road running north and south past the theatre is a Hellenistic fountain house in very good condition. The fountain heads can still be seen: its front was formed by a small Ionic colonnade and entablature.

Below the theatre to the west the Austrians have cleared the terrace either side and below it part of a wide well-paved road running north and south past the theatre towards the stadium and Mount Coressus. At right angles to this road and leading due west from the theatre is the great colonnaded road to the harbour. It is 500 metres long, 20 metres wide and was bordered each side by Corinthian porticoes 5 metres deep: an inscription shews it took its name from Arcadius (395-408 A.D.). Some system of lighting it by lamps appears to have been used.

To the south-west of the junction of these roads and directly adjoining them is a large oblong open court. To the north-east between the Harbour road and Mr. Wood's Prytaneum is a large marble building of uncertain use and of the Roman period. In the centre is a large open paved court, bordered on three sides by a Corinthian colonnade with unfluted columns and mosaic pavement, but on the north by several rows of marble seats rising up on vaulted substructures of brick; even the suggestion that it was a Bouleuterion hardly seems satisfactory. As one proceeds harbourwards on the great road one passes the traces of another cross road running north and south, and much built over by Byzantine houses. Where these roads cross are to be seen the square bases that supported four late monumental columns decorated with niches filled with statues.² By following this cross road southwards one passes through a gate in the Byzantine wall and reaches on the left a marble gateway on the road from the 'Agora,' to the harbour, as proved by the inscriptions found. On following the line of this road eastwards the great marble gate of the agora itself is reached, approached by a flight of much worn steps flanked by narrow projecting colonnades

² v. *Jahreshefte V, Beiblatt*, p. 58.

of six columns. Either side is a large square water basin, the marble slabs of the southern one still shew the marks where water vessels were drawn up. Both these gates are Roman reconstructions of Greek work. The road continued westward and ended at the Roman building on the quay to the south. I understand it is in this region that the excavations will be continued this year: we may expect important results from the complete clearing of the agora and its entrances. Then by returning to the great road and following it westwards one reaches on the right, just before the 'great gymnasium,' which inscriptions shew to have been the *Thermae Constantinianae*, and opposite an *exedra* on the left, an open court in the shape of an oval with the ends cut off, surrounded by a mosaic paved colonnade;³ at the north there is an exit flanked by two sarcophagus-shaped basins decorated with the ubiquitous bucrania and garland pattern, into a wide colonnade marble paved, called the *Atrium Thermarum* in inscriptions found here. Apparently on the

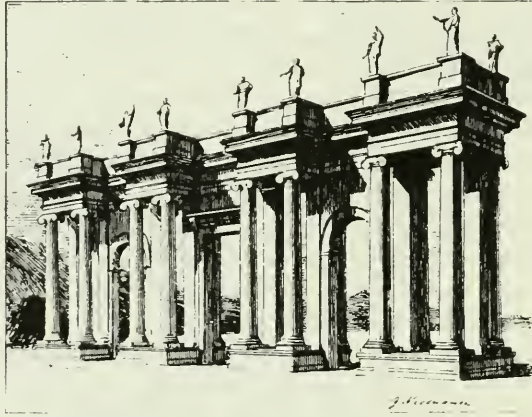


FIG. 4.—RESTORATION.

rebuilding of the city in 263 A.D. after the sack by the Goths, new *Thermae* were built here which encroached on the south-west corner of the Forum. For the oval court already described was then built apparently to supply the place of the southern market hall of the Forum. The plan⁴ of the forum is best seen by climbing one of the brick piers of the great Baths—the forum was a square whose sides were 70 metres long, bordered by Corinthian colonnades 9·80 m. deep. In the centre of each side except on the side against the Baths a large market hall opened into the colonnade; that to the south is the best seen. It is 32×16 metres; was richly decorated with marble on the floor and walls which have round and square recesses symmetrically arranged. Entrance is obtained from the colonnade by eight openings through seven Corinthian pilasters; the roof was of wood and had no central

³ v. *Jahreshefte V, Beiblatt*, p. 59.

⁴ *Jahreshefte I, Beiblatt*, p. 71.

supports; this is inferred from the ashes found inside and the condition of the floor. Just before the road reaches the harbour it passes a Hellenistic tripylon gate which is not exactly in the centre of the way (Fig. 4).^{4a} The central opening is square, while those at the side are arched. The entablature is richly decorated and on both sides the openings are flanked by Ionic columns in pairs. Further against the harbour was a lofty decorative entrance of Roman date in two storeys of the Corinthian order, and of curious shape (Fig. 5). Its side against the harbour is straight, while that towards the Great Road is semicircular. It seems to date from the second century A.D.^{4b}

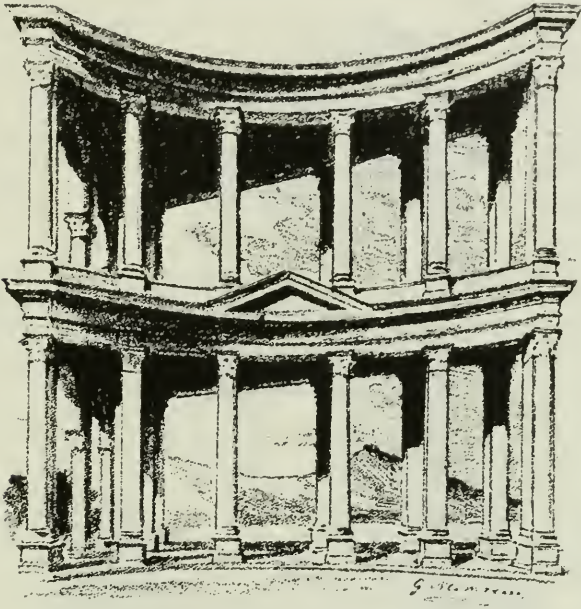


FIG. 5.—RESTORATION.

Beyond, various trenches and trial pits have proved the existence of a colonnaded quay running along the edge of the harbour, and an exchange to the north of the road: but the rapid growth of vegetation, and the presence of water which causes the excavations in this marshy ground to silt up, make examination very difficult, though an elaborate Roman quay building⁵ to the south can be easily seen.

Besides the above important excavations, Dr. Benndorf has explored the wall of Lysimachus. From the large tower called St. Paul's Prison (Fig. 6), a short stretch of wall ran north to the water's edge, and the main wall ran west over the crests of two other hills, turned south across the small valley to another hill and then went east. But just after it turns east and in the dip between

^{4a} Figs. 4, 5, and 7 are after drawings by Prof. Niemann, and from clichés sent by Dr. von Schneider.

^{4b} *Jahreshefte* 1899, *Beiblatt*, p. 19.

⁵ This was the end of the road from the 'Agora.'

the last hill and Mount Coressus is the Coressian gate, of the usual type flanked by two square towers. Then the wall runs east along the topmost ridge of Coressus, on whose flat summit is a small square acropolis, and thence it runs down to the Magnesian gate. The construction of the wall is interesting. It is regularly built of roughly squared blocks of local limestone: the inside is filled with smaller stones packed with red earth. There are at more or less regular intervals well-built square towers with corbelled windows, and here and there along the line of the wall are small posterns. In short, this wall is a fine example of early Hellenistic fortification and in very good condition: the labour of building it on the steep and rocky ridge of Coressus must have been considerable.

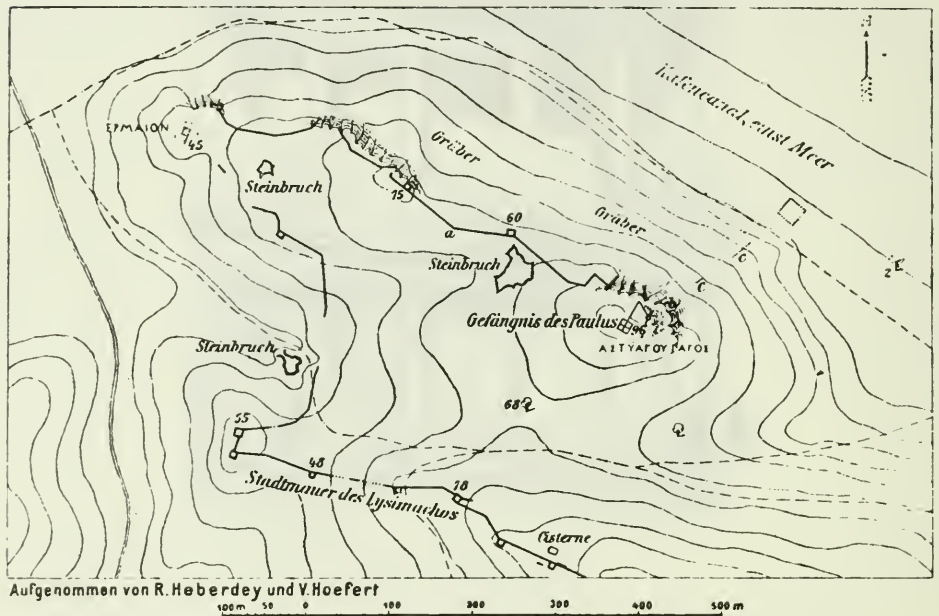


FIG. 6.—WESTERN END OF LYSIMACHEAN WALL.

Besides this, Dr. Heberdey has made a careful study of the remains of a round building on the hill behind the theatre (Fig. 7). It is in two storeys and stands on a square base. The lower storey was of the Doric order with engaged columns. The upper was of the Ionic order and the columns stood free. Further above the Ionic entablature the building took a hexagonal form, and probably ended in a pyramid. The inside was solid and filled up with rough stonework. It clearly belongs to the Hellenistic period, and Dr. Heberdey suggests that it was erected to celebrate the Ephesians' victory at sea off Cyme over Aristonicus, the claimant of the Pergamene throne (*circa* B.C. 132).⁶

One important topographical difficulty has been solved by the discovery

⁶ *Jahreshefte I, Beiblatt*, 1899, p. 79.

of the Hellenistic tripylon mentioned above. Formerly⁷ it was believed that the Great Harbour was of Roman date and that a Hellenistic Harbour once existed somewhere in the marshy ground north-west of Mr. Wood's Prytaneum, between that and the double church. But since the tripylon by the Great Harbour is Hellenistic, then that Harbour was both Hellenistic and Roman. Dr. Heberdey informs me that excavation on the site of the supposed Hellenistic Harbour revealed nothing but late cottages close to the surface⁸: on digging below them nothing was found for some depth and then the trenches filled with water, which is one of the great difficulties excava-

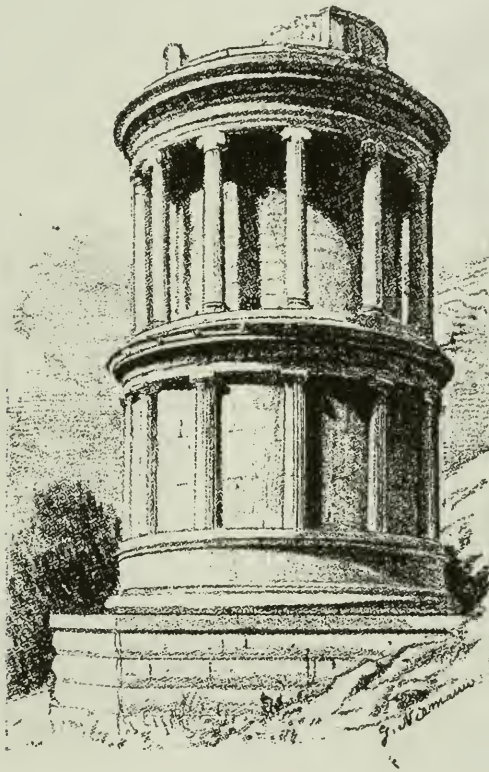


FIG. 7.—RESTORATION.

tion on such a site has always to contend with, and one that can never be really overcome.

Perhaps after all the most interesting of the spoils of Ephesus that have been obtained from these excavations are the numerous pieces of sculpture, both in bronze and marble, which are now temporarily exhibited in the 'Theseus Tempel' in the Volksgarten at Vienna.

Most important of all is the bronze athlete rather over life size

⁷ *Jahreshefte I. Beiblatt*, p. 56.

H.S.—VOL. XXIII.

⁸ *v. Arch. Anz.* 1903, p. 77.

(1.925m. high) already mentioned in this Journal.⁹ It represents a nude youth resting on his right leg (the left being the free leg) in the act of using the strigil (Figs. 8 and 9). The left arm is held down at the side with the palm of the hand downwards in such a position as just slightly to stiffen the muscles: while the right hand which holds the strigil has just reached the wrist in its



FIG. 8.



FIG. 9.

course down the left arm. The head is inclined down to the left to watch the process. Dr. von Schneider¹⁰ in the official catalogue of the exhibition claims this statue as an Attic original of the fourth century. This I think is impossible: not only is the working of the bronze against it, if one can judge by statuettes, especially the two early Hellenistic bronzes in Constan-

⁹ R. C. Bosmquet, 'Archaeology in Greece,' Vol. xx. p. 179.

¹⁰ v. *Ausstellung von Fundstücken aus Ephesos*, p. 3.

tinople,¹¹ but the style of the statue is itself against this view. The face in profile is handsome and perhaps Praxitelean, but seen from the front it appears coarse, heavy, and flat. The hair is brushed up off the forehead in the typical Hellenistic manner which is apparently derived from Alexandroid heads, and is rendered by thickish curling locks heaped clumsily one on the other. The head itself is too big: and there is a swelling bar over the eyes which is not of fourth century modelling. Then the exaggeration of the muscles of the limbs and torso, especially on the chest where they detach



FIG. 10.



FIG. 11.

themselves in great slabs, points to a Hellenistic origin. In my opinion this bronze is a Roman cast¹² of the first century A.D. of a Hellenistic original of the later third century.

Next come the two pieces of a bronze lampstand already described by Mr. Bosanquet in these pages,¹³ and now illustrated (Figs. 10 and 11). The

¹¹ Joubin, *Catologue des Bronzes*, Nos. 4 and 5. The working of the bronze is much nearer (though of course not half so thick or clumsy) that of the bronze boy (Joubin, *op. cit.* No. 6) from Selekeh.

¹² There is in the Museum at Cairo a piece of a Roman mould for casting a Polycleitan bronze; v. Edgar, *Cat. of Moulds*.

¹³ *op. cit. loc. cit.*

delicacy and feeling with which the whole was executed leave no room for doubt that we have in these originals of the Hellenistic period.

First of the marbles comes a fine female head (Fig. 12). This, though



FIG. 12.



FIG. 13

clearly Roman in workmanship, is from its severe style and restraint of execution an accurate and careful copy of an original of the middle of the fifth century.



FIG. 14.



FIG. 15.

Though copied with such detail as to lose all spirit it nevertheless is of great interest and beauty: it bears some resemblance to the Hesperid on the Olympia metope.

Number five is a male portrait as Hermes with wings attached to the head (Fig. 13). This according to Dr. von Schneider is of Polycleitan style.¹⁴ However, on examination nothing definitely Polycleitan appears. The hair though parted in the centre and carefully arranged along the forehead, is not rendered by fine close-lying curls, but in rather thick locks that stand out from the head: besides there is a broad flat bar which presses over the eyes at the outside corners and this is totally un-Polycleitan. The deep-set eyes, the weak chin, narrow jaw, and irresolute mouth with down-curving corners suggest a copy of a Hellenistic portrait, perhaps of Antiochus II.

Number six is a late and clumsy Roman copy of a boy with a duck, clearly a long way after the style of Boëthus (Fig. 14): it resembles very closely the 'Boy with a bird' in the Vatican.

Next is a marble head representing a diademed goddess (Fig. 15). Its treatment is in general sketchy, but not without grace: it is ordinary Roman work of the first century.

Number fourteen is also Roman, but of an entirely different style and



FIG. 16.

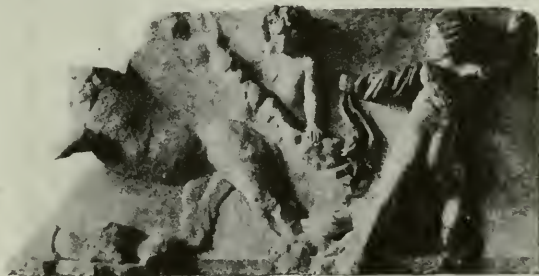


FIG. 17.

character. It is an excellent portrait bust of the Hadrianic period representing a priest of the cult of the Imperial house (Fig. 16). All minor details such as the eyebrows are closely rendered: but it is good and life-like in style.

Figures No. 17 and 18 represent two panels of the frieze of 'Hunting Erotes' also previously described by Mr. Bosanquet.

Last of all is a piece of a most interesting relief which was found face

¹⁴ *op. cit.* p. 10. The numbers cited are also those of the official catalogue.

downwards in the road before the theatre and used as a paving slab. It represents the upper half of an Amazon in the attitude of the Polycleitan statue (Fig. 19). It probably decorated an altar of the later Hellenistic period. For in spite of the excellent modelling of the nude part of the torso, the details of the face and head are not well rendered, and the



FIG. 18.

drapery is clumsily and roughly cut by the drill: and in an earlier period more care would have been taken in the execution. Still it is most important to find at Ephesus, where the statue was set up, even a copy



FIG. 19.

in relief of the masterpiece of Polycleitus. Also deserving of mention is a colossal male head and torso from the theatre representing the Demos of Ephesus: an inscription found with it leaves no doubt as to its identification.



FIG. 20. (From *Arch. Anz.*, 1902, p. 153.)

Miletus.¹⁵ (Fig. 20).

Beyond the lake of Bafi a range of hills runs from Latmus on the south side of the Maeander in a general north-westerly direction. From the most northern point of this range two small hills united with the main range by a long low-lying isthmus project north-east towards the river, which now skirts their slopes. The most easterly of these two hills runs further north, and is broader but lower: between this and the higher hill is a swamp marking the site of one harbour: east of the isthmus lay another harbour and west of it the other two separated by a narrow tongue of land. Further west Lade, now a hill, no longer an island, rises from the fever-haunted marsh.

On the south-west slope of the higher hill stands the theatre: it is a building of the early Imperial period and proves to be in a good state of preservation now it has been laid bare by Dr. Wiegand's excavations. Two broad diazomata divide the whole auditorium: the lowest range of seats contains five *cunei*, the middle ten, and the uppermost twenty: it is calculated that the theatre would seat twenty-five thousand people. It does not rest in a recess of the hill, but is rather built out against it with great curved retaining walls the same height as the hill, springing out on either side. In the thickness of these walls great vaulted branching staircases lead up to the diazomata, to which access is obtained through vaulted passages (2.40 m. wide and 3.20 m. high) running behind them their whole length and communicating with them by frequent openings. Outside the uppermost vaulted passage on the top of the hill there seems to have been a kind of 'foyer' running round the theatre and entered by several small doors. The seats were of marble resting on a foundation of 'opus incertum.' The great staircases at either side are entered from the north-west and south-west, and north-east and south-east; the entrances being on a level with the terrace before the theatre. From these entrances staircases (4.05 m. wide and 10 m. high) lead to a wide landing, and from here a branch leads to the first diazoma. Farther up two branches lead—to take the western side as an example—north-west and north-east, and curving round enter the second diazoma from those directions. On the right of the north-west staircase (and on the left of the north-east) is a series of three large chambers in the wall with windows. Were these used for storerooms, or for criminals and the necessary wild beasts? On the top landing there is a row of marble chairs on either side; and all these vaulted staircases and chambers were well drained. The orchestra is marble-paved and lies 1.85 m. below the lowest row of seats: perhaps there was a low balustrade between the orchestra and the passage before the seats, but the pavement shews signs of alterations made at the time of the sinking of the orchestra. The cornice of the wall round the orchestra is decorated with an anthemion and egg and dart moulding; the wall itself was marble coated and pierced by seven niches. As mentioned above, before the staircase

¹⁵ *Arch. Anz.* 1902, p. 147 *seq.*

entrances there was a wide marble paved terrace: this gave access to the logeion on the same level and also by descending staircases to the room below the logeion. The stage buildings themselves consist of a long skene on the level of the terrace and the lowest row of seats. This, though it had no ground floor, clearly possessed a second storey. Before this was the logeion on the same level supported by three rows of square pillars; the row next to the skene is engaged (Fig. 21). The room below the logeion opened on to the orchestra by three doors; of the logeion itself nothing remains. It is worth remarking that before the orchestra was lowered it was on the same level as the logeion and the two together were then larger than a semicircle. The wall in front of the room below the logeion has been raised and thickened to serve as a Byzantine fortification wall. Behind the skene is a complex of later buildings.



FIG. 21.—WEST END OF STAGE BUILDING, MILETUS THEATRE.

Further to the east below the theatre hill a trench reveals a street running southwards from the harbour towards the great southern gate. To the east of this street on the lowest slope of the hill is a theatre-shaped building of marble, which was, as shewn by inscriptions and other discovered objects, undoubtedly the Boulenterion. Two flights of steps divided the seats into three *cunei*, and the 'orchestra,' nearly a perfect circle, is entered by four doors from the large colonnaded square in front. In this colonnaded square stood a great central altar decorated with a bucrania and garland ornament. Here were found fragments of two friezes, one mythological, and the other decorated with trophies of arms like the balustrade of the Pergamene Stoa. This latter belongs to the Corinthian propylaea of the square. From the unfortunately very fragmentary architrave inscription of the Boulenterion Dr. Wiegand dates it from the reign of Seleucus IV

(187–175 B.C.) or that of his immediate successor. Yet further east, and opposite to the Bouleuterion, stood a Nymphaeum which formed the end of the aqueduct from the Carian hills. It was in two storeys: the uppermost, which was cemented and served as the cistern, was supported on the vaulting of the lower. The outside was covered with marble and decorated with nine niches to each storey. Further, before each niche projected an entablature supported by red marble columns. North of the Bouleuterion square and towards the Harbour some water-filled trenches mark the position of the small¹⁶ agora. For south of the Bouleuterion there has been discovered an enormous agora, which is not yet fully excavated, though some large sale rooms have been cleared. It seems to have been surrounded by a double



FIG. 22.—MILETUS, SOUTHERN GATE.

In centre, pavement of Trajanic level above late Hellenistic gate (wall visible either side).
In right hand front corner entrance between towers of early Hellenistic period.

colonnade, and to have been about 120m. across. Eastwards from the Nymphaeum and close to the edge of the Isthmus Dr. Wiegand has cleared the centre of some late Roman baths with a hypocaust of vaulted brick.

But about the most important piece of work yet done is the complete excavation of the great south gate on the road to Branchidae (Fig. 22). Formerly the gate had only been cleared down to the level of 100 A.D., as shewn by an inscription of the time of Trajan. About a metre below this was found the remains of a late Hellenistic gate flanked on either side by two equal-sized rooms which later were converted into fountains. On the left of the entrance was a tower (10 × 6m.); on the right the wall projects 5 metres in front of the line of the gate. Further outside this gate and not parallel to it lay a

¹⁶ See plan, *Arch. Anz.* 1901, p. 196.

yet earlier gate through which the road ran sideways into the city. It is flanked by two square towers, well built of squared masonry, and clearly is of the early Hellenistic period when Alexander the Great stormed the city in 334 B.C. So five periods in the history of Miletus can be determined (1) Early Hellenistic; (2) Late Hellenistic; (3) Trajanic, when the level of the streets was raised and drains were put down; (4) Reign of Gallienus, when the gaps in the wall were hastily repaired to resist the Goths; (5) Byzantine, as shewn by the fortifications on the theatre hill.

Outside the gate Dr. Wiegand has found a street of tombs of all periods, chiefly Hellenistic: these however I was prevented from seeing.

As one follows the line of the wall westwards, one comes to a trench that reveals an early circular Christian Church. Next is the western gate entered side-ways and guarded by a tower projecting from the wall; on the right of it and against the wall is a staircase 3m. broad which ascended to the top of the defences. The course of the wall can then be followed all along the west side. Northwards Dr. Wiegand has found the line of the great street (5m. wide with a sewer) from the theatre to the south-west gate: on either side are late houses. Then south of the theatre, by the ruins of a later building, a big trial pit shews the marble floor of a Hellenistic gymnasium with an inscription of the usual type cut on the pavement. Also there was apparently a stoa west of the gymnasium. Besides this some trial pits and trenches cut on the east slope of the theatre hill and on the top of the other hill reveal portions of well drained streets and Roman houses, many paved with ordinary mosaic work.

ALAN J. B. WACE.

THREE SCULPTURED STELAI IN THE POSSESSION OF LORD NEWTON AT LYME PARK.

[PLATES XI.—XIII.]

THE recent Exhibition of works of Greek art held at the Burlington Fine Arts Club—although necessarily limited to comparatively small objects—has been sufficient to prove that the traditional wealth of our English collections of classical antiquities still remains a fact. The Exhibition, moreover, has had its use in eliciting information as to works of art on a larger scale, hitherto unknown and unrecorded, that had escaped the vigilance of Waagen and of Conze, of Michaelis and of Furtwängler, and even of our English archaeologists. Thus it was that when the Exhibition was little more than planned I learnt from the well known sculptor, Countess Feodora Gleichen, that there existed at Lyme Park, Lord Newton's Cheshire seat, three fine sculptured Stelai from the best period of Attic art. I am grateful to the owner for granting me permission to publish these inedited works in this Journal, which ought indeed to be the official gazette of the English collections. I have unfortunately been unable to avail myself as yet of Lord Newton's further permission to study the originals. But as photographs of the Stelai are now extant, I have thought it wiser not to postpone the publication for fear that it might be anticipated elsewhere. The information kindly given me by Lord Newton himself has facilitated the discussion and interpretation of the Stelai which, for the rest, are perfectly straightforward examples of their class.

All three reliefs were brought from Greece by the great uncle of the present Lord Newton, the Mr. Thomas Legh who was one of the discoverers and part owners of the sculptures of Phigaleia; he was himself a collector and became in 1816 a member of the Society of Dilettanti.¹ There can be little doubt that the Stelai were discovered by Mr. Legh himself during his stay at Athens in 1812, for in the account which he published of his travels² he states that he carried on an extensive excavation there and was 'fortunate

¹ See Michaelis, *Ancient Marbles in Great Britain*, § 88, p. 160.

² *Narrative of a Journey in Egypt and the Country beyond the Cataracts*, by Thomas

Legh, Esq., M.P. (John Murray 1817). 1812 is given as the date of the visit to Athens on p. 1. On p. 279, however, the excavation is referred to as taking place in May 1811.

enough to discover numerous vases, inscriptions, and bas-reliefs'. Of these bas-reliefs he publishes the one of the actor (below Fig. 2); the other two reliefs now at Lyne are not described, nor is it now known what became of the other 'numerous' objects excavated. (For one vase, however, see note 10, below.)

I.—STELE OF MELISTO AND EPIGENES. (PL. XI.)

At first sight the most interesting and beautiful of the three reliefs is also the largest. Moreover, the rarity of these large sepulchral Stelai outside Athens confers upon it a special value.³ It represents, within the usual Doric aedicula, one of those family groups formerly known as 'scenes of parting' or else 'of reunion,' where wife and husband clasp hands in token of life-long union—with the not unfrequent addition, as here, of an attendant in the background.⁴ As usual in the freer style that obtained towards the close of the fifth century, the two principal figures project slightly beyond the framing pilasters. The height from the lower edge of the frame to the akroterion (now broken) is 4 ft. 10½ in.; the width of the actual Stele, across the pilasters is 2 ft. 10¼ ins.; the extreme width of the pediment is 2 ft. 11¼ ins. Below the akroterion, along the architrave, runs the inscription, after the pattern of countless others:

Μελιστῶ Ἡγεστράτου ἐξ Οἴου⁵ Ἐπιγένης Μικρίωνος Ἐλευσίνιος

Melisto, daughter of Hegestratos, then, it is who sits to the spectator's left, on a cushioned chair without back, leaning against the pilaster, her sandalled feet resting on a footstool. In accordance with the fashion that was popular in Athens from about 450 B.C.,⁶ she wears the thin Ionic chiton with sleeves, under the thicker sleeveless Doric chiton, and over the whole the ample cloak or himation,⁷ one end of which she holds up with the fingers of her left hand. With her right hand she clasps the right of her husband Epigenes, who stands facing her, seen in three quarters by the spectator. He is a bearded personage of mature age; his costume is that of the ordinary Athenian citizen, namely the cloak draped over the left shoulder, leaving right shoulder and breast bare, in the manner familiar from Stelai and from the frieze of the Parthenon. His left arm and hand hang quietly at his side. If compared with similar personages on other tomb reliefs, it will be found that there is a certain individuality in the man's head.

Behind these two figures, and in much lower relief, stands a third—a female attendant carrying what must be her mistress's jewel casket. Her

³ The British Museum, for example, possesses no example on this scale and the same might be said of most other Museums, excepting, of course, the splendid collection at Leyden.

⁴ Numerous examples of this class of relief and of similar compositions may be found in Conze's *Attische Grabreliefs*.

⁵ For the Attic deme *Olois* see Wachsmuth, *Stadt Athen* II. p. 236.

⁶ Furtwängler, *Masterpieces of Greek Sculpture*, p. 29.

⁷ The three garments are best seen on the figure of the beautiful stele from the Kerameikos, Conze, *CLII* (No. 805).

head is shown in profile; her hair is cut short and she wears the sleeveless chiton, without any upper garment.

The lower left-hand corner of the relief is broken away; from the shape of the breakage under the chair, one may conjecture that here was some such object as a wool basket, or perhaps a dog lying down.

The features of Melisto are a good deal rubbed and defaced, though they are less so in the original, I am informed by Lord Newton, than appears to be the case in the reproduction. The technique is not of the most refined, for between our Stele and such a masterpiece as the 'Hegeso,' for instance, there is a great aesthetic gap; the relief doubtless bears the stamp of the workshop rather than of a masterhand, yet the general style is influenced by the great epoch, as the drawing of the heads, the poses, the arrangement and throw of the draperies with their folds represented by grooves, sufficiently indicate. A number of details were probably added in colour. The date is difficult to fix, but it may be roughly placed at about 420 B.C.

II.—STELE OF ARKESIS. (PL. XII).

Arkesis, a young mother holding in front of her her closely swaddled baby—symbol perhaps of the motherhood that has cost her life⁸—sits on a chair without back resting her feet on a low footstool. Her hair, which is tied in a knot at the back, is confined in front by a fillet wound three times round the head. The dress is precisely similar to that worn by Melisto on the preceding stele. The subject is sculptured on a sunk panel⁹ which measures about 1 ft. 2½ in. square, the total breadth of the stele being 1 ft. 2½ in., and its total height to the top of the akroterion 3 ft. 11½ in. The akroterion itself is composed of a high central palmette and two half palmettes at the sides, supported on volutes, which spring from a clump of *akanthos* foliage. This design is of frequent occurrence. On the field between akroterion and panel the name **ΑΡΚΕΣΙΣ** is inscribed.

The work is somewhat rough and superficial, but is of a good period, from the end of the fifth or beginning of the fourth century.

III.—STELE OF AN ACTOR. (PL. XIII).

This is the only one of the three reliefs at Lyme which was published by Mr. Thomas Legh in the book of travels already cited. He alludes to it as follows in a footnote on p. 22: 'the terra-cotta vase of extreme beauty¹⁰ and in

⁸ For the subject cp. the stele at the Brit. Mus. (6 in the Phigaleian Room) of a young mother seated, and in front of her the nurse holding the well swaddled infant.

⁹ This type and shape of stele is common—numerous examples in Conze *op. cit.*

¹⁰ This vase (a pelike) is published by

Stackelberg, *Gräber der Hellenen*, Pl. XVIII and is now in the Brit. Mus.; on the obverse Zeus and Nike with their names inscribed stand on each side of a low altar; on the reverse a female figure is moving away rapidly from another female figure who stands holding a sceptre. R.f. technique. A fanciful conjecture

a state of perfect preservation and the curious basso-relievo of which engravings are given were found in the sepulchres we opened at a short distance from the walls of the city [Athens] on the western side of the road that leads to Thebes.' On p. 288 he describes the relief as follows: 'The marble Basso-Relievo is probably the sepulchral monument of a comic poet; or the two masks may possibly be, the one that of the Comic, and the other that of the Tragic, Muse. It was found in the same spot as the terra-cotta Vase described above, but has no inscription or any other sign on which to build a conjecture.'

In a sense, this relief is, from its subject, the most interesting of the three under discussion. A young man draped in the himation that leaves bare the chest and the right arm and shoulder sits, facing to the right, on a chair with finely curved back. His drapery, which passes over his left shoulder is twisted about the left wrist and then hangs down: the left hand clutches the drapery on the lap. In his right hand the man holds a comic mask which he gazes at intently; in the field above, on the left, hangs a second mask. The masks and the man's head are somewhat defaced. The slab is broken; its breadth is 2 ft. 11 in., its present height 3 ft. 8½ in.

Elderly men are not unfrequently represented seated, on grave-reliefs, but the seated youthful male figure is of comparatively rare occurrence, and in all known cases pose and even gesture seem adapted from the position so familiar on the stelae of girls and women. The present example recalls the beautiful relief at Grotta Ferrata¹¹ of a young man reading in a roll with his book case at his feet. Were it not that the place of its discovery shows the relief to be from a grave, one might have conjectured that it was votive rather than sepulchral; it offers striking analogy to the well known Hellenistic relief in the Lateran (Helbig, *Führer* No. 684) representing an actor (more probably than a poet¹²) studying the mask which, like the actor on our relief, he holds in front of him, while two other masks and an open roll lie on a table opposite. In fact, in spite of the difference of scale and though the sides are reversed, the actors of the Attic and of the Hellenistic relief have identically the same pose and gesture. It may be that the scheme was traditional and that the relief at Lyme is one of its earliest examples. Anyhow this representation of an actor seeking inspiration for the part he is to act from the study of his mask¹³ forms a welcome addition to the class of reliefs which throw light upon ancient dramatic art.¹⁴

EUGÉNIE STRONG.

as to the ashes which the vase contains is put forward by Mr. Legh. It perhaps belonged originally to Mr. Forster, co-proprietor with Legh, Cockerell, and others in the Phigaleian frieze. Then it passed into the possession of the Rev. William Wood of Fulham. In 1895 it was acquired for the British Museum, at a sale at Messrs. Sotheby's.

¹¹ Conze, Plate CXXI (No. 622).

¹² Reisch, *Griechische Weihgeschenke*, p. 54.

¹³ I have no doubt that this motif, which Reisch attributed to the actor in the Lateran relief, is also that of our stele.

¹⁴ F. Studniczka's interesting paper on the Actor relief from the Peiræus (*Mélanges Perrot*, p. 307 ff.), though not bearing exactly on the relief now published, must at any rate be mentioned in this connection.

NOTICES OF BOOKS.

Investigations at Assos. Drawings and Photographs made during the Excavations 1881-1882-1883. By J. T. CLARKE, F. H. BACON, R. KOLDEWEY. Edited with explanatory notes by F. H. BACON. Cambridge, Mass. [Published by the Archaeological Institute of America.] First Part—to be completed in 5 parts at \$5 each.

This long-expected publication of the American excavations at Assos consists of maps and plans, architectural drawings, photographs, and inscriptions. In the text there is little or nothing new; the narrative of the expedition and the inscriptions being merely repeated from the "Papers of the American School at Athens." The descriptions appended to the plates are very slight and there is no discussion of date or other questions. The plates themselves are on a large scale, and finely executed. The First Part, the only one as yet published, contains maps and plans of Assos and the surrounding district, of the Agora, the great Stoa and the Bouleuterion, together with inscriptions and vases found on the sites. Among these is an interesting study of the construction of the Stoa by Mr. Koldevey. Part II. is to contain the baths and heroön, the mosaic pavements, the theatre, the Greek bridge, and the Roman atrium; Part III. the temple and sculptures, the fortification walls and gateways, and the gymnasium; Part IV. the tombs and mausoleums; Part V. the tombs and objects found in them, figurini, coins, vases, Byzantine mosaics, and the Turkish mosque; to these will be added an index and table of contents to the whole.

Troja und Ilion. Ergebnisse der Ausgrabungen in den vorhistorischen und historischen Schichten von Ilion, 1870-1894. Von WILHELM DÖRPFELD. 2 vols. 76 plates, 471 illustrations in text. Athens: Beck and Barth. 1902. 40 m.

The definitive publication of the Trojan excavations has now appeared in a form at once convenient and complete; it will of course be indispensable to students. The numerous illustrations and plans make it easy to follow the descriptions throughout. Nearly half the book is written by Prof. Dörpfeld, including the history of the excavations, the detailed architectural description of the various strata and the buildings they contain, and a final discussion of Homeric Troy and its neighbourhood in relation to the *Iliad*. The clearness of the architectural description with its plans and diagrams is increased by the addition of small letters inserted in the photographic blocks, with references printed below. In this way the reader is never in doubt as to the identity of the various structures represented even in the more complicated views. It has perhaps never been possible before, even for those who have not visited a site, to realise so fully its appearance and the relative position of its various remains. In the last chapter Prof. Dörpfeld identifies the topography of the *Iliad* with an amount of detail not generally attempted. The several other chapters are assigned to specialists: H. Schmidt writes on the pottery, A. Götze on smaller objects of various materials, H. Winnefeld on works of sculpture of later age, and also on the graves and tumuli, A. Brückner on the inscriptions, mainly of Hellenistic and Roman age, and also on the history of Troy and Ilion, H. von Fritze on the coins of Ilion. Though so many collaborators have been employed, the whole work is so concise as to be contained in two volumes of moderate size. Yet all that is essential to our knowledge of Troy seems to be included. The only regret is that Schliemann did not survive to see so worthy a monument of the excavations that were the chief aspiration of his life.

Das Athener Nationalmuseum. Phototypische Wiedergabe seiner Schätze. By J. N. SVORONOS. Heft 1. Pp. 16 and 10 plates. Athens: Beck & Barth, 1903. 6 m. 80.

This is the first part of a work, which, if it is carried out, will be of great importance. It is proposed to issue about six to eight parts each year, which will give some sixty to eighty plates of objects in the Athenian Museum, and which will be accompanied by a commentary by Mr. Svoronos. The objects are to be treated in groups, such as sculptures, bronzes, vases, terracottas, etc. Inscriptions and objects of the Mycenaean period are excluded. The first part is occupied with the bronzes of Antikythera, and the text gives a full account of the diving operations.

Die Skulpturen des Pergamon-Museums in Photographien. 33 plates. Berlin: G. Reimer, 1903. 45 m.

A portfolio of thirty-three unmounted platinotypes of the Pergamon Museum at Berlin and its sculptures, which will be of service in the continued absence of an adequate publication of the collection. The series includes the restored orders of the temple of Athene at Priene, and of the temple of Artemis at Magnesia on the Maeander.

Recueil de Têtes antiques ideales ou idéalisées. By SALOMON REINACH. Pp. vii + 230. 276 plates, and 18 illustrations. Paris: Gazette des Beaux-Arts, 1902. 20 f.

M. Reinach publishes in this volume a collection of some 250 heads, of an ideal or semi-ideal character, arranged as far as possible in chronological order, and accompanied by a full commentary, with references to earlier literature. The heads are for the most part such as would be found in a gallery of casts, but some are unfamiliar, and welcome.

The author justly claims that his book is inexpensive, but it may be doubted whether the method of reproduction employed (tracings from photographs on paper prepared for process work) is satisfactory. The contours are well and carefully rendered, but the surface texture is flat and wanting in detail. The plates may be said to have the same relation to photographs that casts have to original marbles.

Greek Moulds. [Catalogue général des Antiquités Égyptiennes du Musée du Caire.] By C. C. EDGAR. Pp. xvii + 89. 33 plates. Cairo: Service des Ant. de l'Égypte. 1902. (24 fr. 60).

A catalogue of the plaster and clay moulds in the Cairo Museum, used in the manufacture of bronzes and terracottas. The moulds for bronzes form by far the larger and more interesting part of the collection, as they not only comprise some charming fragments of later Greek Art, but are also important from their bearing on ancient bronze-casting. Mr. Edgar gives reasons for supposing that the bulk of the moulds come from factories at Mit Rahineh (Memphis) and assigns them generally to the Roman period, while a comparison with Alexandrian coin types of the second century A.D. affords a closer date for some of the fragments.

The major part of the introduction is devoted to a very careful discussion of the technical processes employed in making and using these moulds in bronze-casting. Almost all are piece-moulds of plaster and Mr. Edgar concludes that they were not used in the actual casting, but for making the perishable moulds (loam or wax) in which this was done and which are destroyed in the operation.

Little is to be learned from literary sources on this subject. Pollux (x. 189) certainly implies that some form of the process known as 'cire perdue,' was known to the ancients, but it is much too troublesome for everyday use.

Mr. Edgar also discusses the methods used in making terracottas. His moulds are usually bipartite, fitted with mortises and tenons and made of plaster—in which two latter points they differ from the moulds used for Greek terracottas, which have, almost always, smooth edges, and are made of clay. As Mr. Edgar rightly observes, the two halves of a cast from a mortised mould must have been joined in the mould, and the cast withdrawn whole, like a bronze casting, whereas in Greek terracottas the halves are joined by hand, after withdrawal from the mould. Three hundred and sixty-six moulds are described, and the more important are figured in the plates.

Studia Pontica. Vol. i. *A Journey of Exploration in Pontus.* By J. G. C. ANDERSON. Pp. 104. Nine coloured maps and sixteen illustrations, mainly from author's photographs. Brussels: H. Lamertin, 1903. 7 fr. 50.

This is the first fascicule of four which are to form a single volume, embracing the ancient topography, the epigraphic remains, and the history of Roman Pontus. By a rare and welcome agreement the eminent Belgian explorer, M. Franz Cumont, is collaborating with Mr. Anderson, each author using his native tongue. The second and fourth fascicules will be by M. Cumont: the third (the inscriptions), by both authors: the first, now before us, is by Mr. Anderson alone. It narrates a methodical exploration, carried out in 1899, in south-western and south-central Pontus. The main lines of communication were followed, ancient sites visited, and modern villages ransacked for monuments with that indefatigable care which Prof. W. M. Ramsay has taught his pupils to use. The principal results (some have been already provisionally published) are the tracing of part of the imperial highways, from Caesarea to Amisus, and from Ancyra by way of Andrapa and Neocaesarea to Satala and the sources of Euphrates. The latter, though perhaps hardly to be styled "the great trans-Asiatic road," was among the most important of Roman highways in the East, and continued to be a main route of war and trade all through the Middle Ages. Among sites that Mr. Anderson identified or finally fixed are those of Etonea, Mithridation—Euagina, Eupatoria—Magnopolis, and Andrapa—Neoclaudiopolis, (with Phazimon—Neapolis). He assigns likely sites to various minor places, and discusses the authorities, with which he shows singularly full acquaintance. He makes much the same use of the Peutinger Table as Prof. Ramsay, occasionally yielding to the temptation to juggle with its names and numerals. May we express a hope that there will be uniformity in the orthography of place-names in all the fascicules? We already note that Tokat is likely to reappear as Tokad.

Asia Minor. By J. G. C. ANDERSON (Murray's Handy Classical Maps), with index. London: John Murray, 1903. 1s.

This is a map of Asia Minor, Cyprus, and North Syria as far east as parallel 42°, projected on a scale of 1 : 2,500,000, and contoured by thousand foot intervals, above 1000 feet, and, below that standard to sea-level and 600 feet. The levels are differentiated in tint with the clearness characteristic of Messrs. Bartholomews' best work. Modern names, wherever identifications are certain, appear in italics within brackets. Roads of different classes are distinguished, and provincial boundaries and names, as they were at the death of Nero, are printed in red. The Troad appears in an inset, doubled in scale. The detail is as accurate as it can be made in a country, little of which has been accurately surveyed.

Antike Schlachtfelder in Griechenland. Bausteine zu einer antiken Kriegsgeschichte. Von J. KROMAYER. Band I: von Epaminondas zum Eingreifen der Römer. Pp. x+352. 6 Lithographic maps, 4 Photographie Plates, 3 Sketches in Text. Berlin: Weidmann, 1903. 12 m.

This book is based on an expedition to Greece, and an examination of various sites made in the spring of 1900. Eighty-eight pages are devoted to Mantinea (362 B.C.), 62 to Chaeronea (338 B.C.), 69 to Sellasia (221 B.C.), and 30 to Mantinea (207 B.C.). Special attention is given in each case to the strategy of the whole campaign as well as to the battle itself, and interesting estimates are given of the strength of the forces engaged. The book is written from a more definitely military point of view than most works of the kind. It is dedicated to the Chief of the General Staff of the German Army, and is written in collaboration with two of its members. The author believes that the military operations of antiquity are useful for the practical study of modern strategy and tactics, and his Introductory and Concluding Chapters, on the general points of interest brought out by these particular battles, are well worth reading. Some careful work is also done on the Chronology of the Campaigns. The book ends with seven pages explanatory of the Maps and Photographs, and 4 pages of Bibliography. It should be remarked that 5 of the lithographic maps are only adapted from the best existing maps: that of Sellasia is based on an original survey.

Geschichte der griechischen und makedonischen Staaten seit der Schlacht bei Chaeronea. Von B. NIESE. 3 Teil: von 188 bis 120 v. Chr. Pp. xi+468. Gotha: Perthes, 1903. 12 m.

The third and concluding volume of Niese's work brings the history of the Greek and Macedonian States down to 120 B.C. The choice of the stopping-point is dictated by external reasons only: space-limits, and the desire to avoid plunging too deeply into what is regarded as merely Roman history. In other words, one more historian of Greece (or his publisher) has lost heart on the threshold of the period which cries aloud to be dealt with anew. Like the preceding volumes, this contains a careful, more or less annalistic treatment of the period, from one point of view only. All the non-political elements, all the wider issues of history, social problems, the progress of culture, etc., are practically excluded. Thus we have indeed a history of the Greek States, and their political squabbles, not a history of Greece; for the only unifying element in the Greek world at this time was Greek culture, and of this we are told little or nothing. Doubtless it was necessary to bring the writer's task into a possible compass; and as a bare record of historical 'events' this volume is no less useful than its predecessors. A short appendix sums up the chief recent contributions to the chronology of the whole period. A fuller list of additions and corrections, bringing volumes I and II up to date, was to be expected (*e.g.* it is not noted that C.I.A. II 184 has been shown to have nothing to do with the Lamian War). There are no genealogical tables. The index is adequate and useful.

Les Phéniciens et l'Odyssee. I. By VICTOR BÉRARD. Pp. vii+591. Many illustrations, photographic views of localities and reproductions of charts. Paris: Armand Colin, 1902. 25 fr.

The fluent author of many modern political studies and of "L'origine des Cultes aréadiens" here comes forward as champion of the Semites against the author of "Le Mirage oriental." Bringing to his task considerable acquaintance with the Levant coasts, M. Victor Bérard tries to re-establish the Phoenicians by a minute analysis of the topographical and social evidence contained in a part of the *Odyssey*. He would show (1) that the poem displays intimate local knowledge of the Mediterranean coasts from Sidon to the Ocean. (2) That such knowledge is only consistent with Phoenician ideas as they might have been set

forth in a Semite's Periplus. After an introduction on 'Topology'—a name proposed for the science of the interrelation of localities and events—M. Bérard examines the 'Telemacheia' at great length, satisfying himself that the Pylos of the poem is the site of Samikon near Kyparissia, and that the Pherae of Diocles was not in Messenia, but on the Arcadian border at the later Alipherae. Then with much ingenuity, but by a rather circular process, he argues that Telemachus' route presupposes both Phoenician thalassocracy, and Phoenician transit trade. The Semitic seamen's Paradise he finds in the district of Megara-Nisaea; "Syria" in Syra: the city of Alcinous on a west Corfiote site near Palaeo-kastrizza; Ithaca, not in Leukas, but in Ithaka. There is little novelty in all this, beyond the abundance, even redundancy, of detail with which the author's theories are supported. But the most startling contention in the book is the situation proposed for Calypso's isle. That wooded well-watered retreat is found in the woodless waterless islet of Peregil, lying west of Centa under the highest peak of the Sierra Bullones, the Monkey Mountain, which, for M. Bérard, is the African Pillar of the Sky. To take such a mean and barren isle of difficult approach as well known to the Phoenician mariners, and having been adopted as a Paradise from their accurate Periplus by a poet, who, it is maintained, always describes realities, is, to say the least, inconsistent. There is much interesting comment in the book, drawn from the author's knowledge of literature and the localities. Of prehistoric Aegean antiquities he takes practically no account at all. Perhaps their relation to his enquiry is to be treated in the seven parts, which will form the second volume.

Macedonian Folklore. By G. F. ABBOTT. Pp. x + 372. Cambridge: University Press, 1903. 9s. net.

Folklorists will welcome these gleanings from a rich and little explored field. Mr. Abbott's account of peasant life in Macedonia with its seasonal festivals, and innumerable superstitions in which Paganism and Christianity are quaintly blended, makes pleasant reading. The general reader will be chiefly impressed by the extraordinary universality of certain practices and beliefs; exact parallels from the ends of the earth are quoted by the author for many of the customs and proverbs he has collected, and many more might have been adduced from ancient Greece alone. From the point of view of Hellenic studies, the most interesting chapters are those devoted to the "Folk Calendar," and "the Seasons," and that on "Spirits and Spells." The last shows that the belief in wood and water nymphs remains deeply rooted in the popular mind; the Olympians have vanished, but the Dryads and the Nereids still hold their own in this out-of-the-way corner of Europe.

Études de Littérature et de Rhythmique grecques. Par HENRI WEIL, Membre de l'Institut. 240 pp. Paris: Hachette et Cie, 1902. 5 f.

M. Weil has here gathered up a number of articles in which, with a freshness of interest remarkable in a veteran scholar, he has welcomed and assisted to interpret some of the recent discoveries in the sphere of Greek literature. The book falls into two parts. The first contains short studies of two dramatic fragments among the Amherst Papyri; a fifth century vellum fragment of the *Birds* of Aristophanes (ll. 1057-1085, 1101-1127), recently acquired by the Louvre; the Strassburg prologue to a drama of the New Comedy, originally edited by Kaibel; four hymns from Delphi; the additional fragments of the eighth mime of Herondas; the incomplete romance of Ninus, published by Wilcken; and a few other such pieces. The second part includes a number of notes and essays upon metrical points, originally written at various times in the last forty years, but now revised and brought up to date with reference to the most recent accessions of material. In the present chaotic state of metrical theory, it is useful to have these essays, which maintain an attitude different from that of the recently dominant school of Westphal, but practically coincident with that of Blas, Wilamowitz and other modern scholars.

Greek Papyri from the Cairo Museum together with Papyri of Roman Egypt from American Collections. [Preprint from vol. v. of the Decennial Publications of the University of Chicago, 1902.] 78 pp. 6s.

Mr. Goodspeed's volume contains (1) fifteen papyri from the Cairo Museum, (2) twelve from a collection made by the Rev. J. R. Alexander and deposited by him in the Museum of Westminster College, New Wilmington, Pennsylvania, and (3) three, one being of great length, from the editor's own collection. Two of the Cairo papyri are literary, one, of the second century, containing portions of *Od.* xv. 216-231, 239-253, in which an obelus stands against 251 and a $\delta\pi\lambda\eta$ against 247 and 250; the other is a small metrical fragment, of the same date. The remainder are miscellaneous documents, ranging from the middle of the third century B.C. to A.D. 362. Of the Alexander papyri nine are receipts for seed-corn advanced by the sitologi of Karanis in A.D. 158-9. Of the editor's own papyri one is apparently a passenger's boat-ticket, another is a record of legal proceedings with regard to the will of a soldier, Amatus Priscus, presumably the father of the Amatia Prisca mentioned in *Brit. Mus. Pap.* 470; and the third is an account of private receipts and expenditure, in forty-seven columns, covering seven months from October 191 to April 192. The texts are printed with accents, stops, etc., and are provided with short introductions and notes, and full indices, which add greatly to the value of any publication of papyri, making it easy to survey in the first instance and to refer to afterwards.

Homerische Paläste: eine Studie zu den Denkmälern und zum Epos. By FERD. NOACK. Pp. 100. Leipzig: Teubner, 1903.

In this small monograph Dr. Noack discusses first the relation between the ground plans of the royal prehistoric buildings discovered on the Greek mainland and at Troy, and those of the Palaces of Cnossus and Phaestus. He calls attention to important differences between the two groups, *e.g.* the relation of the *Megaron* to the smaller chambers; the division of the façade; the choice of a long or short side for the front; the simplicity or complexity of the room arrangement. He concludes that there were distinct types of 'Aegean' Palace, northern and southern; that these had developed very differently, the first from the simple one-roomed house, traces of which can be seen at Troy, the second from Eastern buildings. The former type alone influenced later Greek architecture, and may be seen in the ordinary Temple scheme of classical times: the latter, though belonging to the home of 'Mycenaean' art, died out. Further, in a section devoted to the Homeric Palace, the author contends that neither the northern nor the southern type, described above, answers to the Homeric type. Finally he discusses the 'Temple Façade' fresco discovered at Cnossus in Mr. Evans' first season and published in this Journal.

For other works received see List of Accessions to the Library.

ERRATUM.

P. 44 l. 3: *for Tanais read Toni.*

INDEX TO VOLUME XXIII.

INDEX TO VOLUME XXIII.

I.—INDEX OF SUBJECTS.

A

ACHILLES PONTARCHES at Olbia, 45 f. ; island of, *ibid.*
 Actor, stele of, 358 f.
 Agias of Lysippus, 127 f.
 Agorai of Pergamum, 335 f.
 Aidinjik (Cyzicus), inscriptions from, 80 f.
 Alexander, brother of Laodice, non-existence of, 116
 Alexandria, terracotta cart from, 142
 Alexandrian Hexameter Fragments, 237 f.
 Alexandria Troas, Seleucid coins of, 101 ; Antiochus Hierax and, 116
 Alsos Hecates in Crimea, 46
 Amazon relief from Ephesus, 350
 Anatomy, treatment of, in Cerigotto statues, 219 f.
 Antiochus, early Seleucid coins bearing the name, 92 f.
 Antiochus I., coinage of, 107 f.
 Antiochus II., coinage of, 108 f.
 Antiochus V., coins of, 113
 Antiochus Hierax, coinage and history of, 107
 Antiochus, son of Antiochus III., 112
 Antiochus, son of Seleucus III., non-existence of, 111
 Apene, 141, 143
 Aphrodite : at Olbia, 24 f. ; temple at Peiraens, 24 ; *ἡ ἐμ βάσσαις*, 25 ; *Ἀπάτουρος*, 25 f. ; *Γαμοστόλος* 239, 242 ; *Εὔπλοια*, 24 ; *Ναυαρχίς*, 25 ; *Οὐρανία*, 26 f. ; Pandemos, 26 f.
 Apollo : at Cyzicus, 88 f. ; Castellani head, 120 ; Citharoedus, sacrifice to (Cyzicus), 87 ; Citharoedus of Vatican, type of head, 123 ; *Κρατεανός* (sacrifice to), 87 f. ; Mausoleum head, 121 f. ; Oldfield head, 117 f. ; Pourtales head, *ibid.* ; of Tenea, 228 ; *ἀρχηγέτης*, 88 ; *Ταδοκωμείτης*, 88
 Apoxyomenos of the Vatican not Lysippic, 130
 Ares at Olbia, 42
 Argive school of sculpture, 223 f.

Aristogeiton, head on statue of, at Naples, 221
 Aristotle (*Pol.* 1302 b, 1304 b) on Megarian history, 5
 Arkesis, stele of, 358
 Armed race, 269 f.
 Arsinoe, wife of Philadelphus, poem referring to, 239
 Artaki (Cyzicus), inser. from, 87
 Artemis at Olbia, 28 f. *Ἀγγοτέρα*, 28
 Asclepiadae at Cyzicus, 89
 Asklepios at Cyzicus, 79, 90 ; at Olbia, 44
 Astragalizon (?) from Cerigotto, 232
 Athena : Ergane, likna with firstfruits erected to, 298 ; at Olbia, 30 f. ; head on Olbian coins, 31 f. ; *Σώτρυπα*, 30
 Athens, antiquities at : statues from Cerigotto, 152 f., 217 f. ; r.f. pyxis with marriage-scenes, 132 f. ; b.f. pinax with cart, 143 ; Cyprus terracotta cart 140.
 Athlete, bronze, from Cerigotto, 222 ; from Ephesus, 346
 Attic fresco- and vase-painting, technique compared with Cnossian, 200, 202
 Axe, double, on Cnossian ware, 203 f. ; on Zakro ware, 255 f.

B

BANQUET-RELIEF from Cyzicus, 79
 Barbotine ware from Zakro, 259
 Beer-Dionysus, 323
 Berlin Museum : Corinthian pinax with cart, 139 ; vases with racing-scenes, 271, 276 f., 286 ; coins of Olbia, 42, 51 ; Seleucid coins, 94 f.
 Bevelled edge on Greek coins, 105
 Bird-fresco at Cnossus, 198
 Block wheel, 145
 Borysthene, R., cult at Olbia, 50 f. ; head on coins, *ibid.*
 Boulauterion at Miletus, 353 f.
 Bourguignon skyphos with hoplitodromos, 283 ; amphora with hoplitodromos, 287
 Boy with duck, from Ephesus, 349

Braziers, pottery, from Zakro, 258
 British Museum: head and shoulder of
 Apollo from Mausoleum, 121 f.; b.f.
 vase with marriage-procession (B 174),
 315 f.; vases with foot-race: (B 628), 272;
 (E 6), 273; (E 22), 288; (E 78), 285;
 (E 818), 285; Chalcidian vase with rustic
 cart (B 17), 139; Panath. amphora with
 chariot-race (B 130), 143; archaic plate
 with sacrifice of goat, 138; Etruscan
 bronze (Demeter in cart), 135; terra-
 cotta plaque with Dionysus in liknon,
 295; Alexandrian terracotta cart, 142;
 marble votive disk, 318 note: coins of
 Olbia, 33, 34; Seleucid coins, 97 f.
 Bromios, Dionysus, 323
Bügelkannen from Zakro, 257 f.
 Bull on Olbian coins (Borysthenes?), 50

C (see also K)

CABEIRI, cult at Olbia, 44
 Calceiric vases with rustic carts, 137, 138
 Cambridge, Fitzwilliam Museum: kylix
 with hoplitodromos, 286; Pashley
 Sarcophagus, 296, 322; votive disk, 319;
 Seleucid coin 99; Cretan *θυράκι*, 303 f.;
 modern winnowing-basket, 299
 Cart, country, of ancient Greece, 132 f.
 Catchword theory of the Theognidea, 12 f.
 Cerigotto, bronze statues from, xxxviii, 152 f.,
 217 f.
 Chariot used for wedding-processions,
 132 f.
 Cnossus, Palace at, 327 f.; pottery of,
 157 f.
 Coins: Crannon (car), 149; Etruria (wheel),
 147; Hadriani (liknon), 295; Messina
 and Rhegium (car), 143; Nicæa (liknon),
 295; Olbia, 30 f.; Seleucid (*βασιλέως*
Αντιόχου), 92 f.; Thraco-Macedonian
 (cart), 144
 Comedy, Megarian, 5
 Cook, Sir Fredk., kylix with hoplitodromoi,
 288 f.
 Corinthian pinax with cart, 139
 Cotys, S. Julius, at Cyziens, 91
 Cradle, liknon used as, 294
 Crannon, coins with sacred car, 149
 Crescent motive in Cnossian pottery, 178 f.;
 with disk in relief on Zakro ware, 254
 Crete, dominance of, in 'Mycenaean' style,
 199; see also Cnossus, Palaikastro,
 Zakro
 Cross-bar wheel, 145
 Curse on sacrilege, 85
 Curves in Greek art, analysis of, xxxvii.
 Cybele, stelae with, from Cyziens, 80, 82
 Cyprus: terracotta carts from, 140, 141
 Cyrnus, friend of Theognis, 1 f.
 Cythera—see Cerigotto
 Cyziene staters at Olbia, 31
 Cyziens, inscriptions from, 74 f.

D

DELPHI, copy of Agias of Lysippos at, 127
 Democracy at Megara, 3 f.
 Diadumenos of Delos, 223 f.
 Diaulos, 261 f.
 Dies, duration of, in ancient coins, 99 f.
 alteration of, 102
 Dionysus; at Olbia, 41; travelling-car of,
 144; use of liknon in his mysteries, 317 f.;
 "Απειος, 41; Liknites, 294 f.
 Dioscuri, cult at Olbia, 43 f.
 Disk, votive, with liknophoria, 318 f.; disk
 and crescent on Zakro ware, 254
 Dolichodromoi on vases, 268 f.

E

EGYPT, relations with Crete, 163 f., 182 f.,
 201; imported pottery in, 163 f., 182 f.;
 pottery with white-filling from, 159
 Ephesus, recent excavations at, 340 f.
 Epidaurus, race-course at, 264 f.
 Epigenes and Melisto, stele of, 357
 Eretria, marriage-pyxis from, 132, 150
 Eros hunting, frieze from Ephesus, 349,
 350
 Etruscan coin with cross-bar wheel, 147
 Eumenes II., his wall at Pergamum, 336 f.
 Ephronius kylix with armed foot-race,
 278
 Eyebrows, treatment of, in Greek sculpture,
 220

F

'FAN,' mystic, 292
 Fertility, use of liknon to promote, 314 f.
 Finland, winnowing instruments from,
 308 f.
 Firstfruits carried in liknon, 296 f.
 Fish-fresco at Cnossus, 189
 Florence, Mus. Civ., blue glass amphora with
 scene of initiation, 320, 322
 Flower, conventionalised, in Mycenaean
 ornament, 253, 254
 Foot-race, the Greek, 261 f.
 Fork, winnowing, 304 f.
 'Fruit-stand' Minoan vases, 174

G

GATE, southern, of Miletus, 354
 Gentinus, a Seleucid Mint? 102
 Geometric ware (pre-historic), from Cnossus,
 169 f.; from Melos, 170
 Glasgow (Hunter Mus.), Seleucid coins at,
 96
 Glaze of Cnossian pottery, 162 f.; of Zakro
 pottery, 248 f.
 Gorgoneion on Olbian coins, 32
 Gotha, Seleucid coin at, 99
 Gynnasium at Pergamum, 338

H

HADRIANI, coin with Hermes in liknon, 295
 Hagne, the, Seleneid coins at, 95
 Hair, treatment of in Cerigotto statues, 218 f., 221, 234
 Handle inside vase from Zakro, 250
 Harbours of Ephesus, 343, 345
 Hauser Collection, vase with jumping-scene, 272
 Heats in Greek races, 266
 Hecate, at Zeleia (relief), 86
 Helios cult at Olbia, 42
 Heracles : cult at Olbia, 48 ; poplar-crowned, 129 ; of Lansdowne House, 128 f.
 Hermes : cult at Olbia, 39 f. ; statues from Cerigotto, xxxviii, 217 f., 226 f. ; of Praxiteles, 154, 218 f. ; in liknon, 294 f. ; portrait-head as, 348, 349 ; 'Αγῶνας, 39
 Hexameter Fragments, Alexandrian, 237 f.
 Hippodrome type of race-course, 261 f.
 'Hole-mouth' vases from Zakro, 249 f., 257
 Homer, *Od.* xxii, 126-177, commented on 325 f.
 Homeric House, 325 f. ; race, 261
 Hoplitodromoi on vases, 269 f.
 Horns of Consecration on Chossian pottery, 203 f.
 Horse grazing, mint-mark of Alexandria Troas, 101
 Horseman and dog relief from Cyzicus, 84
 House, the Homeric, 325 f.
 Humorous representations of Greek athletics, 273, 291

I

IACCHUS, vanner of, 293 f., 317 f.
 Incised ware, first appearance at Chossus, 158 f.
 Initiation, scenes of, 313 f., 320 f.
 Inscriptions from Cyzicus, 74 f.

J

JUMPING-SCENES on vases, 272

K

KAKHUN, imported pottery at, 183
 Kamäres ware from Chossus, 160 f. ; from Zakro, 248 ; link with Mycenaean, 254 ; surviving into Mycenaean period, 259
 Kefti, Cretan vases carried by, 201
 Krobylos, heads of Apollo with, 118

L

LAMPAEDROMIA, 289 f.
 Lampstand, bronze from Ephesus, 347

Lansdowne House : Heracles after Lysippos, 128 f.
 Leuke, island of, 45 f.
 Liber, Father, 322
 Libyo-Egyptian and Aegean civilisations synchronous, 163
 Ligurio, athlete of, 223, 228
 Liknites, Dionysus, 294, 322
 Liknon, 294 f.
 Liknophoria, 313 f.
 Lontrophoros, 150
 Louvre : b. f. vase, (Campana), with rustic cart, 136 ; vases with racing-scenes, 270 ; Hellenistic relief (Schr. lxxx), with offering of firstfruits, 297
 Lykos kylix (Hartwig, pl. lxii, 1), 287
 Lyme Park (Cheshire), stelai at, 356
 Lyric metre, 71
 Lysimachean wall of Ephesus, 343 f.
 Lysippos, Agias of, 127 ; characteristics of his style, 127 f.

M

MARRIAGE-SCENES, 132 f. ; liknon carried at, 315
 Mausoleum, head of Apollo from, 121
 Megara, birthplace of Theognis, 2 ; political history, 3 f.
 Megaron in Homeric house, 328 f.
 Meleager of the Vatican, Lysippic, 128
 Melisto and Epigenes, stele of, 357
 Melos (Phylakopi), vases of Cretan style from, 187 ; imported Mycenaean ware, 199 ; houses, 327 f.
 Mercurago, wooden wheels from, 145 f.
 Messina, mule-car on coins of, 143
 Metal prototypes of pottery, 174, 248 f., 251
 Metre, lyric, 71
 Miletus, recent excavations at, 352
 Minoan pottery of Chossus, 157 f.
 Mule-car, racing, 143
 Munich : Hellenistic relief (Schr. lxxx), 298 ; r. f. amphora with cart, 142 ; kylix with jumping-scene, 272 ; with faucy foot-races, 283 f.
 Musical form in Greek lyrics, 72
 Mycenae, Palace at, 327 f. ; vases of Cretan style from, 187, 194
 Mycenaean technique in Minoan pottery, 165 f. ; ware from Zakro, 251 f., 255 f.
 Mystic character of the winnowing-fan, 313 f.

N

NAPLES : amphora with hoplitodromos, 286
 Naturalism in Chossian pottery, 194 f.
 Neolithic pottery of Chossus, 157 f.
 Newton (Lord), stelai belonging to, 356
 Nicaea, coin with Dionysus on liknon, 295
 Nomos (*Persae*) by Timotheus of Miletus, xlv.
 Nymph, head of, on Olbian coins, 34 f.
 Nymphaeum at Miletus, 354

O

- OLBA, Zeus of, 37 f.
 Olbia, cults of, 24 f.; coins of, 31
 Oldfield head of Apollo, 116 f.
 Olympia, arrangements for races, 262 f.
 Oskophoria, 291
 Overlapping of rhythms, 73
 Oxford (Ashmolean Mus.): head of Apollo, 116 f.

P

- 'PALACE' style pottery from Chossus, 183 f.
 Palaeography of Alexandrian Hexameter Fragments, 238
 Palaikastro, vases from, 251 f.
 Palermo, amphora with hoplitodromos, 286
 Panathenaic amphorae with racing-scenes, 268 f.
 Panderma (Cyzicus), inscriptions from, 78 f.
 Papyrus with Alexandrian Hexameter Fragments, 237 f.
 Paris (Bibliothèque), Euphronius kylix (Hartw. Pl. xvi.), 277 f.; Seleucid coins, 95. (*See also* Louvre.)
 Parthenon, principle underlying curves and proportions of, xxxvii.
 Peiraeus, Conon's Temple of Aphrodite at, 24
 Pentathlon, method of deciding, 54 f.
 Pergamum, recent excavations at, 335 f.
Persae of Timotheus of Miletus, xlvi.
 Phallophoria, 318, 320
 Phanagoria, Aphrodite Apatouros at, 25 f.
 Philosopher, head of, from Cerigotto, 233
 Phylakopi—*See* Melos
 Plataea, armed race at, 282
 Plato (*Laws* 629, 630), on birthplace of Theognis, 2
 Polychrome Minoan vases, 171 f.
 Polycleitus, statuette after, from Cerigotto, 222 f.; influence on athletic art, 227; *ἀσπυγίζοντες* of, 232
 Pontarches, Achilles, 45
 Poseidon at Olbia, 40; Ἀσφάλειος, 25; Σωσίνεος, 25, 40
 Pottery—*See* Chossus, Palaikastro, Zakro.
 Pourtales head of Apollo, 118
 Praxiteles and the Cerigotto bronze, 154; style of, 218 f.
 Priest of imperial cult, bust of, 349
 Proportion, natural basis of, xxxvii.
 Purification by the liknon, 314 f.
 Purse, Hermes holding, 229 f.

R

- RACE, the Greek foot-, 261 f.
 Restoration of bronze statues at Athens, 153
 Rhegium, mule-car on coins of, 143
 Rhodes and Olbia, connection between, 24, 43

- Rhythms, overlapping of, 73
 Rippled surface in early Cnossian pottery, 160, 181
 Rome: Museo Gregoriano: kylix with hoplitodromos, 286; with Hermes in liknon, 294
 — Museo delle Terme: urn with scene from mysteries, 313 f.; stucco relief, 320 f.
 — Villa Albani: relief (Schr. lix.), 134

S

- SABAIA, Illyrian for beer, 323
 Salamis (Cyprus), lead model of cart from, 136
 Sarikeui (Zelea), inscription from, 86
Schnabelkannen from Zakro, 253, 257
 Scopas, head of Apollo from school of (Mausoleum), 123; Palatine Apollo, 124; works of his school, xxxviii, 126 f.; and the Cerigotto bronze, xxxviii, 154; his style, 217 f., 221
 Scythian type of head on coins of Olbia, 50 f.
 Seleucid portraits, 92 f.
 Seleucus I., coin with name of Antiochus, 110
 Seleucus, son of Antiochus I., 110
 Setrans, Sir Robert de, brass of, 312
 Sheep-bell vases from Chossus, 170, 180
 Shovel used in winnowing, 302
 Sieve, cleansing of grain by, 308
 Silenus and Priapus on country cart, 134
 Spiral motive in Cnossian pottery, 179
 Stadiodromoi on vases, 268 f.
 Stadium-race, 261 f.
 Stelai at Lyme Park, Cheshire, 356 f.

T

- TAURIC ARTEMIS, 29
 'Tea-cup' Minoan vases, 171 f.
 Tendril pattern on Zakro pottery, 249, 251
 Tenea, 'Apollo' of, 228
 Theagenes of Megara, 3 f.
 Theatre of Ephesus, 340 f.; of Miletus, 352 f.
 Thebes, Cabeiric vases with rustic carts, 137, 138
 Theognis and his poems, 1 f.
 Thracio-Macedonian coins with cart drawn by oxen, 144
 Tilt of cart, 140 f.
 Timotheus of Miletus, *Persae* of, xlvi.
 Tiryns, Palace at, 326 f.
 Tisamenus and the pentathlon, 55, 59
 Torch-race, 289 f.
 Travelling-cart, 139 f.
 Triptolemus, travelling car of, 144
 Tübingen, bronze statuette of hoplitodromos, 270 f.

V

VALLUS = fan, 310
 Vannus, 292 f.
 Vaphio, vases of Cretan style from, 194
 Ventilabrum, 310
 Verona, Mus. Lapid. : relief with liknon and Dionysiac mask (Schr. ci.), 318
 Vienna : sculptures from Ephesus at, 345 f. ; pelike with armed race, 285
 Vulci, sarcophagus with marriage-procession, 147

W

WEDDING-SCENES, Greek, 132 f.
 Wheels, early types of, 132 f.
 White-filling in early Cnossian pottery, 159
 Whorl, three-leaved, on Mycenaean pottery, 253, 256

Winged diadem on Seleucid coins, 93 f.
 Winnowing, 293 f., 299 f.

Y

ΥΑΡΑΪΙΚ (Cyzicus), inscriptions, 84 f.
 Yeni Keui (Cyzicus), inscriptions, 75 f.

Z

ZAKRO, pottery from, 248 f.
 Zeleia, inscription from, 86
 Zeus : at Cyzicus, 80 ; at Olbia, 36 f. ; sacrifice to (Cyzicene relief), 80 ; 'Αραβύριος, 38 ; Βασιλεύς, 37 ; 'Ελευθέριος, 37 ; 'Ολβιος, 37 ; Πολιάρχης, 37 ; Σωτήρ, 36 ; 'Υψιστος, 80.

II.—GREEK INDEX.

ἀγαθοί, οἱ, Theognis' use of, 9

Ἀγοραῖος, Hermes, 39

Ἀγροτέρα, Artemis, 28

ἀγωνοθέτης, 77

ἀθρηηλογός, 301

ἄλματα, 265

Ἀνδιγόνη, 86

Ἀπίτουρος, Ἀπατουριάς, Aphrodite, 25 f.

ἀπήνη, 141, 143

ἀποτριάζειν, 63, 64

Ἄρειος, Dionysus, 41

ἀρήμιος for ἀρήμιος, 238

ἀρμάμαξα, 141

Ἀσκληπιεῖα τὰ μεγάλα (Gyzicus), 77

Ἀσφάλειος, Poseidon, 25

Ἀταβύριος, Zeus, 38

Βολβίδες, 265

Βατήρ, 272

Βασίλειος, Zeus, 37

Βάσσαι, Aphrodite ἡ ἑμ., 25

γαμικοὶ λέβητες, 150

γαμοστόλος, Aphrodite, 239

γραμμαί, of race-course, 264 f.

δειλοί, οἱ, Theognis' use of, 10

δίκαια, τὰ τῆς πολιτείας, 83

δύλος πονηρός=dolus malus, 85

δρομικὰ, τὰ, 57

δρόμος Ἀχιλλέως, 45

Ἐλευθέριος, Zeus, 37

ἐπιλοιβή, 244

ἔρωτες πτηνοί, 212

ἔσται αὐτῷ πρὸς τὸν θεόν, 75

Εὔπλοια, Aphrodite, 24 f.

Εὐσέβεια, 80, 86

ἔφεδρος, 56 f.

ἡγεμῖνες, Theognis' use of, 8 f.

θεοὶ οἱ ἐν Σαμοθράκῃ, 44

θρύναξ, 303 f.

θυρνάκι, 303 f.

ι for ε in Alexandrian Papyrus, 238

ἱερός for ἱερός, 238

ἵππιος δρόμος at Plataea, 232

κακοί, οἱ, Theognis' use of, 8 f.

κάμπειαι, races, 261

καμπτήρες, 265, 268

κκτ for κτ, 239

κλινίς, 132

Κραταεῖος, Apollo, 87 f.

λασιωτής, 244

λαύρη, in Homeric house, 329 f.

λικμητήριον, 304

λίκνον, 294 f.

Λοκήϊα, 76

μύκχος, &c., 239

μυροβύστης, 242

Ναυαρχίς, Aphrodite, 25

νυμφεύτνια, 150

νύσσα, 261, 268

ὁδὸς ἐς λαίρην, in Homeric house, 329 f.

Ὀλβιος, Zeus, 37

ὀλβίατα, 244

ὀπφθαλμός, 239

ὀρσοθύρη, in Homeric house, 329 f.

Ὀρτησία, 78

Ὀύρανία, Aphrodite, 26 f.

πάλαισμα, 55

Πάνδημος, Aphrodite, 26 f.

παινηγυριάρχης, 77

Παρθένος, Artemis, 28 f.

πάροχος, 132, 137, 150, 151

πεῖρινθα, 135

πιστός, in Christian inscriptions, 75

Πλακῆδιστος, 86

Πολιάρχης, Zeus, 37

προσκόψει=προσκόψει, 75

πρεβ=πρεσβύτερος, 84

πρίον, 302 f.

ῥώγες μεγάρου, in Homeric house, 332 f.

Σαμοθράκη, θεοὶ οἱ ἐν, 44

σκηνή = tilt of cart, 141

σσθ, σσμ, σσπ, σστ for σθ, σμ, σπ, στ, 238, 239

στάθμαν, δραμεῖν ποτί, 266

συνόμενος, 242

σφενδόνη, of race-course, 262

σφρηγίς, of Theognidea 1 f.

σχάζειν, 263

Σωσίνεος, Poseidon, 25, 40

Σώτεια, Athena, 30

Σωτήρ, Zeus, 36

Ταδοκωμείτης, Apollo, 88

τάξεις (heats in races), 266

τετακγμένοι, 239

τριαγμός, τριάζειν, &c., 58 f., 63

Τρουδουνηνός 175

ὑπακρος 66 f.

ὑσπληξ 262 f.

Ω, earliest occurrence in inscriptions, 115

III.—BOOKS NOTICED.

- Abbott, *Macedonian Folklore*, 364
 Adam, *Republic of Plato*, 207
 Anderson, *Studia Pontica* 362; *Asia Minor*, 362
 Baur, *Eileithyia*, 213
 Bérard, *Les Phéniciens et l'Odysée*, 363
 Bevan, *House of Seleucus*, 213
 Clarke, Bacon, and Koldewey, *Investigations at Assos*, 360
 Collignon et Couve, *Catalogue des Vases Peints du Musée Nat. d'Athènes*, 209
 Cook, *Handbook to the G. and R. Antiquities in the B. M.*, 212
 de Ridder, *Catalogue des Vases Peints de la Bibliothèque Nat.*, 210
 de Visser, *Die nicht menschengestaltigen Götter*, 214
 Dörpfeld, *Troja und Ilion*, 360
 Edgar, *Greek Moulds*, 361
 Furtwängler und Reichhold, *Griechische Vasenmalerei*, 209
 Gardner, *Ancient Athens*, 208
 Goodspeed, *Papyri from Cairo Museum*, 365
 Grenfell, Hunt, and Smyly, *Tebtunis Papyri*, 206
 Haussoullier, *Études sur l'Histoire de Milet et du Didymeion*, 213
 Hill, *Coins of Ancient Sicily*, 212
 Imhoof-Blumer, *Kleinasiatische Münzen*, II. 211
 Kirchner, *Prosopographia Attica*, 212
 Kromayer, *Antike Schlachtfelder*, 363
 Macran, *Harmonics of Aristoxenus*, 215
 Murray, *Sculptures of the Parthenon*, 213
 Niese, *Geschichte der gr. u. makr. Staaten III.*, 363
 Noack, *Homerische Paläste*, 365
 Oberhummer, *Die Insel Cypern*, 214
 Pauly-Wissowa, *Real-Encyclopädie, Supp. I.*, 212
 Pollak, *Klassisch-Antike Goldschmiedearbeiten*, 210
 Reinach (S.), *Recueil de Têtes antiques*, 361
 Reinach (T.), *L'Histoire par les Monnaies*, 211
Skulpturen des Pergamon-Museums, 361
 Svoronos, *Das Athener Nationalmuseum*, 361
 Waldstein and others, *Argive Heraeum*, 208
 Weicker, *Der Seelenvogel*, 215
 Weil, *Littérature et Rhythmique grecques*, 364
 White and Allen, *Ἀριστοφάνους Κωμῳδίαί, Facsimile of Cod. Ven.*, 207
 Wilamowitz-Möllendorf, *Timotheos, die Perser*, 206
 Wroth, *Catalogue of the Coins of Parthia*, 211

RULES

OF THE

Society for the Promotion of Hellenic Studies.

I. THE objects of this Society shall be as follows :—

I. To advance the study of Greek language, literature, and art, and to illustrate the history of the Greek race in the ancient, Byzantine, and Neo-Hellenic periods, by the publication of memoirs and unedited documents or monuments in a Journal to be issued periodically.

II. To collect drawings, facsimiles, transcripts, plans, and photographs of Greek inscriptions, MSS., works of art, ancient sites and remains, and with this view to invite travellers to communicate to the Society notes or sketches of archæological and topographical interest.

III. To organise means by which members of the Society may have increased facilities for visiting ancient sites and pursuing archæological researches in countries which, at any time, have been the sites of Hellenic civilization.

2. The Society shall consist of a President, Vice-Presidents, a Council, a Treasurer, one or more Secretaries, and Ordinary Members. All officers of the Society shall be chosen from among its Members, and shall be *ex officio* members of the Council.

3. The President shall preside at all General, Ordinary, or Special Meetings of the Society, and of the Council or of any Committee at which he is present. In case of the absence of the President, one of the Vice-Presidents shall preside in his stead, and in the absence of the Vice-Presidents the Treasurer. In the absence of the Treasurer the Council or Committee shall appoint one of their Members to preside.

4. The funds and other property of the Society shall be administered and applied by the Council in such manner as they shall consider most conducive to the objects of the Society: in the Council shall also be vested the control of all publications issued by the Society, and the general management of all its affairs and concerns. The number of the Council shall not exceed fifty.

5. The Treasurer shall receive, on account of the Society, all subscriptions, donations, or other moneys accruing to the funds thereof, and shall make all payments ordered by the Council. All cheques shall be signed by the Treasurer and countersigned by the Secretary.

6. In the absence of the Treasurer the Council may direct that cheques may be signed by two members of Council and countersigned by the Secretary.

7. The Council shall meet as often as they may deem necessary for the despatch of business.

8. Due notice of every such Meeting shall be sent to each Member of the Council, by a summons signed by the Secretary.

9. Three Members of the Council, provided not more than one of the three present be a permanent officer of the Society, shall be a quorum.

10. All questions before the Council shall be determined by a majority of votes. The Chairman to have a casting vote.

11. The Council shall prepare an Annual Report, to be submitted to the Annual Meeting of the Society.

12. The Secretary shall give notice in writing to each Member of the Council of the ordinary days of meeting of the Council, and shall have authority to summon a Special and Extraordinary Meeting of the Council on a requisition signed by at least four Members of the Council.

13. Two Auditors, not being Members of the Council, shall be elected by the Society in each year.

14. A General Meeting of the Society shall be held in London in June of each year, when the Reports of the Council and of the Auditors shall be read, the Council, Officers, and Auditors for the ensuing year elected, and any other business recommended by the Council discussed

and determined. Meetings of the Society for the reading of papers may be held at such times as the Council may fix, due notice being given to Members.

15. The President, Vice-Presidents, Treasurer, Secretaries, and Council shall be elected by the Members of the Society at the Annual Meeting.

16. The President and Vice-Presidents shall be appointed for one year, after which they shall be eligible for re-election at the Annual Meeting.

17. One-third of the Council shall retire every year, but the Members so retiring shall be eligible for re-election at the Annual Meeting.

18. The Treasurer and Secretaries shall hold their offices during the pleasure of the Council.

19. The elections of the Officers, Council, and Auditors, at the Annual Meeting, shall be by a majority of the votes of those present. The Chairman of the Meeting shall have a casting vote. The mode in which the vote shall be taken shall be determined by the President and Council.

20. Every Member of the Society shall be summoned to the Annual Meeting by notice issued at least one month before it is held.

21. All motions made at the Annual Meeting shall be in writing and shall be signed by the mover and seconder. No motion shall be submitted, unless notice of it has been given to the Secretary at least three weeks before the Annual Meeting.

22. Upon any vacancy in the Presidency, occurring between the Annual Elections, one of the Vice-Presidents shall be elected by the Council to officiate as President until the next Annual Meeting.

23. All vacancies among the other Officers of the Society occurring between the same dates shall in like manner be provisionally filled up by the Council until the next Annual Meeting.

24. The names of all candidates wishing to become Members of the Society shall be submitted to a Meeting of the Council, and at their next Meeting the Council shall proceed to the election of candidates so proposed: no such election to be valid unless the candidate receives the votes of the majority of those present.

25. The Annual Subscription of Members shall be one guinea, payable and due on the 1st of January each year ; this annual subscription may be compounded for by a payment of £15 15s., entitling compounders to be Members of the Society for life, without further payment. All Members elected on or after January 1, 1894, shall pay on election an entrance fee of one guinea.

26. The payment of the Annual Subscription, or of the Life Composition, entitles each Member to receive a copy of the ordinary publications of the Society.

27. When any Member of the Society shall be six months in arrear of his Annual Subscription, the Secretary or Treasurer shall remind him of the arrears due, and in case of non-payment thereof within six months after date of such notice, such defaulting Member shall cease to be a Member of the Society, unless the Council make an order to the contrary.

28. Members intending to leave the Society must send a formal notice of resignation to the Secretary on or before January 1 ; otherwise they will be held liable for the subscription for the current year.

29. If at any time there may appear cause for the expulsion of a Member of the Society, a Special Meeting of the Council shall be held to consider the case, and if at such Meeting at least two-thirds of the Members present shall concur in a resolution for the expulsion of such Member of the Society, the President shall submit the same for confirmation at a General Meeting of the Society specially summoned for this purpose, and if the decision of the Council be confirmed by a majority at the General Meeting, notice shall be given to that effect to the Member in question, who shall thereupon cease to be a Member of the Society.

30. The Council shall have power to nominate British or Foreign Honorary Members. The number of British Honorary Members shall not exceed ten.

31. Ladies shall be eligible as Ordinary Members of the Society, and when elected shall be entitled to the same privileges as other Ordinary Members.

32. No change shall be made in the Rules of the Society unless at least a fortnight before the Annual Meeting specific notice be given to every Member of the Society of the changes proposed.

RULES FOR THE USE OF THE LIBRARY

AT 22 ALBEMARLE STREET.

I. THAT the Library be administered by the Library Committee, which shall be composed of not less than four members, two of whom shall form a quorum.

II. That the custody and arrangement of the Library be in the hands of the Hon. Librarian and Librarian, subject to the control of the Committee, and in accordance with Regulations drawn up by the said Committee and approved by the Council.

III. That all books, periodicals, plans, photographs, &c., be received by the Hon. Librarian, Librarian or Secretary and reported to the Council at their next meeting.

IV. That every book or periodical sent to the Society be at once stamped with the Society's name.

V. That all the Society's books be entered in a Catalogue to be kept by the Librarian, and that in this Catalogue such books, &c., as are not to be lent out be specified.

VI. That, except on Christmas Day, Good Friday, and on Bank Holidays, the Library be accessible to Members on all week days from eleven A.M. to six P.M. (Saturdays, 11 A.M. to 2 P.M.), when either the Librarian, or in his absence some responsible person, shall be in attendance. Until further notice, however, the Library shall be closed for the vacation from July 20 to August 31 (inclusive).

VII. That the Society's books (with exceptions hereinafter to be specified) be lent to Members under the following conditions:—

- (1) That the number of volumes lent at any one time to each Member shall not exceed three.
- (2) That the time during which such book or books may be kept shall not exceed one month.
- (3) That no books be sent beyond the limits of the United Kingdom.

VIII. That the manner in which books are lent shall be as follows:—

- (1) That all requests for the loan of books be addressed to the Librarian.
- (2) That the Librarian shall record all such requests, and lend out the books in the order of application.
- (3) That in each case the name of the book and of the borrower be inscribed, with the date, in a special register to be kept by the Librarian.
- (4) Should a book not be returned within the period specified, the Librarian may reclaim it.

- (5) All expenses of carriage to and fro shall be borne by the borrower.
- (6) All books are due for return to the Library before the summer vacation.

IX. That no book falling under the following categories be lent out under any circumstances :—

- (1) Unbound books.
- (2) Detached plates, plans, photographs, and the like.
- (3) Books considered too valuable for transmission.
- (4) New books within one month of their coming into the Library.

X. That new books may be borrowed for one week only, if they have been more than one month and less than three months in the Library.

XI. That in the case of a book being kept beyond the stated time the borrower be liable to a fine of one shilling for each week after application has been made by the Librarian for its return, and if a book is lost the borrower be bound to replace it.

The Library Committee.

MR. J. G. C. ANDERSON.
 PROF. W. C. F. ANDERSON.
 MR. TALFOURD ELY.
 PROF. ERNEST A. GARDNER.
 MR. F. G. KENYON, D.Litt.
 MR. GEORGE MACMILLAN, D.Litt. (*Hon. Sec.*)
 MR. J. L. MYRES (*Hon. Keeper of Photographic Collections*).
 MR. ARTHUR HAMILTON SMITH (*Hon. Librarian*).
 MRS. S. ARTHUR STRONG, LL.D.

Applications for books and letters relating to the Photographic Collections, and Lantern Slides, should be addressed to the *Librarian* (Mr. J. ff. Baker-Penoyre), at 22 Albemarle Street, W.

SESSION 1903—1904.

General Meetings will be held in the Rooms of the Society of Antiquaries, Burlington House, London, W., for the reading of Papers and for Discussion, at 5 P.M. on the following days :—

1903.

Tuesday, November 3rd.
 Tuesday, November 24th.

1904.

Tuesday, February 23rd.
 Tuesday, May 3rd.
 Tuesday, June 28th (Annual).

The Council will meet at 4.30 p.m. on each of the above days.

THE SOCIETY FOR THE PROMOTION OF HELLENIC STUDIES.

OFFICERS AND COUNCIL FOR 1903—1904.

President.

SIR RICHARD JEBB, Litt.D., D.C.L., LL.D. M.P.

Vice-Presidents.

PROF. S. H. BUTCHER, Litt.D., LL.D., D.Litt.
PROF. INGRAM BYWATER, Litt.D., LL.D.
REV. PROF. LEWIS CAMPBELL, LL.D.
MR. SIDNEY COLVIN.
MR. ARTHUR J. EVANS, F.R.S., D.Litt., LL.D.
PROF. ERNEST GARDNER.
PROF. PERCY GARDNER, Litt.D.
MR. WALTER LEAF, Litt.D.
MR. D. B. MONRO, Litt.D., LL.D., Provost of Oriel
College, Oxford.

MR. A. S. MURRAY, LL.D.
PROF. H. F. PELHAM, LL.D., President of Trinity
College, Oxford.
PROF. W. M. RAMSAY, D.C.L., LL.D., Litt.D.
MR. J. E. SANDYS, Litt.D.
REV. PROF. A. H. SAYCE, LL.D.
SIR E. MAUNDE THOMPSON, K.C.B., D.C.L.,
LL.D.
PROF. R. V. TYRRELL, Litt.D., D.C.L., LL.D.
MR. CHARLES WALDSTEIN, Litt.D.

Council.

PROF. W. C. F. ANDERSON.
REV. A. G. BATHER.
MR. R. CARR BOSANQUET.
PROF. J. B. BURY, LL.D., Litt.D., D.Litt.
MR. H. G. DAKYNS.
MR. LOUIS DYER.
MR. TALFOURD ELY.
LADY EVANS.
REV. JAMES GOW, Litt.D.
MR. B. P. GRENFELL, Litt.D., D.Litt.
MISS JANE HARRISON, LL.D., D.Litt.
MR. G. F. HILL.
MR. D. G. HOGARTH.
MR. A. S. HUNT, D.Litt.
MR. F. G. KENYON, D.Litt.
MR. WILLIAM LORING.

MR. GEORGE MACDONALD.
MR. G. E. MARINDIN.
MR. R. J. G. MAYOR.
MR. ERNEST MYERS.
MR. J. L. MYRES.
MISS EMILY PENROSE.
REV. G. C. RICHARDS.
PROF. WILLIAM RIDGEWAY.
MR. E. E. SIKES.
MR. A. HAMILTON SMITH.
MR. CECIL SMITH, LL.D.
MRS. S. ARTHUR STRONG, LL.D.
MR. F. E. THOMPSON.
MR. H. B. WALTERS.
PROF. A. S. WILKINS, LL.D., Litt.D.

Hon. Treasurer.

MR. DOUGLAS W. FRESHFIELD.

Hon. Secretary.

MR. GEORGE A. MACMILLAN, D.Litt., ST. MARTIN'S STREET, W.C.

Hon. Librarian.

MR. ARTHUR H. SMITH.

Hon. Keeper of Photographic Collections.

MR. J. L. MYRES.

Librarian and Keeper of Photographic Collections.

MR. J. H. BAKER-PENOYRE.

Assistant Treasurer.

MR. GEORGE GARNETT.

Assistant Secretary.

MR. S. J. LUDBROOK.

Acting Editorial Committee.

PROF. ERNEST GARDNER, | MR. G. F. HILL. | MR. F. G. KENYON.

Consultative Editorial Committee.

SIR RICHARD JEBB | PROFESSOR BYWATER | SIR E. MAUNDE THOMPSON | MR. SIDNEY COLVIN
PROFESSOR PERCY GARDNER, and MR. R. CARR BOSANQUET (ex officio) as
Director of the British School at Athens.

Auditors for 1903-1904.

MR. ARTHUR J. BUTLER. | MR. GEORGE LILLIE CRAIK.

Bankers.

MESSRS. ROBERTS, LUBBOCK & CO., 15 LOMBARD STREET.

CAMBRIDGE BRANCH
OF
THE SOCIETY FOR THE PROMOTION
OF HELLENIC STUDIES.

OFFICERS AND COMMITTEE FOR 1903-1904.

Chairman.

SIR RICHARD JEBB, LITT.D., D.C.L., LL.D., M.P.

Vice-Chairman.

MR. J. E. SANDYS, LITT.D.

Committee.

MR. J. G. FRAZER, LL.D.
PROF. ERNEST A. GARDNER.
MR. HENRY JACKSON, LITT.D.
PROF. W. RIDGEWAY.

MR. E. E. SIKES.
MR. ARTHUR TILLEY.
MR. A. W. VERRALL, LITT.D.
MR. C. WALDSTEIN, LITT.D.

Hon. Secretary.

MR. ARTHUR BERNARD COOK, TRINITY COLLEGE.

HONORARY MEMBERS.

- HIS MAJESTY THE KING OF THE HELLENES, à M. le Secrétaire du Roi de Hellènes, Athens.
- Hofrath Dr. Friedrich August Otto Benndorf, K. K. Österr. Archæologisches Institut, Vienna.
- Sir Alfred Biliotti, K.C.B.
- Prof. Friedrich Blass, *The University, Halle, Germany.*
- Prof. D. Comparetti, *Istituto di Studi Superiori, Florence.*
- M. Alexander Contostavlos, Athens.
- Prof. A. Conze, *Kaiserl. Deutsches Archæologisches Institut, Cornelius-str., 2, 11. Berlin.*
- Prof. Wilhelm Dörpfeld, Ph.D, D.C.L., *Kaiserl. Deutsches Archæologisches Institut, Athens.*
- Monsieur L'Abbé Duchesne, *Ecole Française, Rome.*
- Monsieur P. Foucart, 13, *Rue de Tournon, Paris.*
- Prof. Adolf Furtwängler, *The University, Munich.*
- Monsieur J. Gennadius, D.C.L., 14, *de Vere Gardens, Kensington.*
- Prof. Federico Halbherr, *Via Arenula, 21, Rome.*
- His Excellency Hamdy Bey, *Keeper of the Museum of Antiquities, Constantinople.*
- Monsieur Joseph Hazzidakis, *Keeper of the National Museum, Candia, Crete.*
- Prof. W. Helbig, *Villa Lante, Rome.*
- Monsieur Homolle, *Ecole Française, Athens.*
- Monsieur P. Kavvadias, *Ephor-General of Antiquities, Athens.*
- Prof. A. Kirchhoff, *The University, Berlin.*
- Prof. U. Köhler, *The University, Berlin.*
- Prof. A. Michaelis, *The University, Strassburg.*
- Prof. E. Petersen, *Instituto Archeologico Germanico, Monte Tarpeo, Rome.*
- Prof. Rufus B. Richardson, *The American School of Classical Studies, Athens.*
- Prof. Ulrich v. Wilamowitz-Möllendorff, *The University, Berlin.*
- Prof. Adolf Wilhelm, K. K. Österr. Archæologisches Institut, Athens, Greece.

LIST OF MEMBERS.

* *Original Members.* † *Life Members.* ‡ *Life Members, Honoris Causa.*
The other Members have been elected by the Council since the Inaugural Meeting.

- † Abbot, Edwin H., 1, *Follen Street, Cambridge, Mass., U.S.A.*
- Abbott, G. F., 15, *Emmanuel Road, Cambridge.*
- † Abercrombie, Dr. John, 23, *Upper Wimpole Street, W.*
- Adam, James, Litt.D., *Emmanuel College, Cambridge.*
- Adams, Miss Mary G., 43, *Camden Hill Square, Kensington, W.*
- Ainger, A. C., *Eton College, Windsor.*
- Ainger, Rev. Canon, *Master's House, The Temple, E.C.*
- † Ainslie, R. St. John, 3, *Haldon Terrace, Dawlish, South Devon.*
- Alford, Rev. B. H., 51, *Gloucester Gardens, W.*
- Allbutt, Professor T. Clifford, M.D., F.R.S., *Chaucer Road, Cambridge.*
- Allcroft, A. Hadrian, 15, *Chepstow Villas, W.*
- Allen, J. B., *c/o Bank of Montreal, 22, Abchurch Lane, E.C.*
- Allen, T. W., *Queen's College, Oxford.*
- Amherst, Lord, *Didlington Hall, Brandon, Suffolk.*
- † Anderson, J. G. C., *Christ Church, Oxford.*
- Anderson, J. R., *Lairbeck, Keswick.*
- Anderson, Prof. W. C. F. (Council), *University College, Sheffield.*
- Anderson, Yarborough, 40, *Pall Mall, S.W.*
- Anderton, Basil, *Public Library, Newcastle-on-Tyne.*
- Andrews, Prof. Newton Lloyd, *Colgate University, Hamilton, N.Y., U.S.A.*
- Anstruther, Miss, 13, *Chelsea Gardens, Chelsea, S.W.*

- Archer-Hind, R. D., *Trinity College, Cambridge*.
- † Arkwright, W., *Adbury House, Newbury*.
- Asquith, Raymond, *All Souls' College, Oxford*.
- Asquith, W. W., *Clifton College, Bristol*.
- Avebury, The Right Hon. Lord, *High Elms, Hayes, Kent*.
- Awdry, Herbert, *Wellington College, Berks*.
- Bailey, Cyril, *Balliol College, Oxford*.
- Bailey, J. C., 20, *Egerton Gardens, S.W.*
- Baker, H. T., *New College, Oxford*.
- Baker-Penoyre, J. ff. (Librarian), *Leighton House, Holland Park Road, W.*
- * Balfour, Right Hon. A. J., M.P., 10, *Downing Street, S.W.*
- * Balfour, Right Hon. G. W., M.P., *Board of Trade, Whitehall, S.W.*
- Ball, Sidney, *St. John's College, Oxford*.
- Baring, Hon. Cecil, *c/o Messrs. Coutts and Co., 59, Strand, W.C.*
- † Barlow, Miss Annie E. F., *Greenethorne, Edgworth, Bolton*.
- Barlow, Lady, 10, *Wimpole Street, W.*
- Barnsley, Sidney H., *Pinbury, near Cirencester*.
- Barran, J. N., *Wetwood, Leeds*.
- Bather, Rev. Arthur George (Council), 8, *Kingsgate Street, Winchester*.
- Bayfield, Rev. M. A., *Park Grange, Edgbaston, Birmingham*
- Beare, Prof. John I., 9, *Trinity College, Dublin*.
- † Beaumont, Somerset, *Shere, near Guildford*.
- Bell, Miss Gertrude, 95, *Sloane Street, S.W.*
- Bell, Rev. G. C.
- Benjamin, A. F., 24, *Norfolk Square, W.*
- † Benn, Alfred W., *Il Cilegio, San Gervasio, Florence*.
- Bennett, S. A., *Hill House, Ewelme, Wallingford*.
- Benson, Frank Sherman, 214, *Columbia Heights, Columbia, Brooklyn, N.Y., U.S.A.*
- Bent, Mrs. Theodore, 13, *Great Cumberland Place, W.*
- † Bernays, A. E., 3, *Priory Road, Kew, Surrey*.
- Berridge, Miss Edith, *Dunton Lodge, The Knoll, Beckenham*.
- Bevan, E. R., *Banwell Abbey, Somerset*.
- Bickford-Smith, R. A. H., 29, *Ladbroke Grove, W.*
- Bienkowski, Prof. von P., *Basztowa, 5, Krakau*.
- † Bikelas, Demetrius, *Athens, Greece*.
- Billson, Charles J., *The Wayside, Oadby, Leicester*.
- Bishop, Major Tuke, 3, *Tokenhouse Buildings, King's Arms Yard, E.C.*
- † Bissing, Dr. von, *Leopoldstrasse, 54, Munchen*.
- Blackledge, Miss Katherine, 21, *Gambier Terrace, Liverpool*.
- Blunt, A. W. F., *Exeter College, Oxford*.
- Bodington, Prof. N., *Principal of the Yorkshire College, Leeds*.
- Bond, Edward, M. P., *Elm Bank, Hampstead, N.W.*
- Bosanquet, Rev. F. C. T., *The Hermitage, Uplyme, Devon*.
- Bosanquet, R. Carr (Council), *British School of Archaeology, Athens*.
- Bousfield, William, 20, *Hyde Park Gate, S.W.*
- Boyd, Rev. Henry, D.D., *Principal of Hertford College, Oxford*.
- Boys, Rev. H. A., *North Cadbury Rectory, Bath*.
- Bramley, Rev. H. R., *The Precentory, Lincoln*.
- Bramwell, Miss, 73, *Chester Square, S.W.*
- Branteghem, A. van, 8, *Rue du Buisson, Brussels*.
- Brinton, Hubert, *Eton College, Windsor*.
- Briscoe, Miss, *Neuch Hill, Shifnal*.
- Broadbent, H., *Eton College, Windsor*.
- Brooke, Rev. A. E., *King's College, Cambridge*.
- Brooke, Rev. Stopford A., 1, *Manchester Square, W.*
- Brooks, E. W., 28, *Great Ormond Street, W.C.*
- Brooksbank, Mrs., *Leigh Place, Godstone*.
- Brown, A. C. B., *New College, Oxford*.

- Brown, Horace T., F.R.S., 52, *Nevern Square, South Kensington, S.W.*
Brown, Horatio F., c/o Messrs. Mackenzie & Black, 28, *Castle St., Edinburgh.*
†Brown, James, *Netherby, Galashiels, N.B.*
Brown, Prof. G. Baldwin, *The University, Edinburgh.*
Brown, S. R., *Epsom College, Surrey.*
*Bryce, The Right Hon. James, D.C.L., Litt.D., M.P., 54, *Portland Place, W.*
Bull, Rev. Herbert, *Wellington House, Westgate-on-Sea.*
Buls, M. Ch., 40, *Rue du Beau-Site, Bruxelles.*
Bulwer, Sir Henry, K.C.M.G., 17, *South Audley Street, W.*
Burge, Rev. Hubert M., *The College, Winchester.*
Burgh, W. G. de, *University College, Reading.*
†Burnaby, R. B., *Trinity College, Glenalmond, Perth.*
Burnet, Prof. J., 1, *Alexandra Place, St. Andrews, N.B.*
Burrows, Prof. Ronald, *University College, Cardiff.*
Bury, Prof. J. B., LL.D. Litt.D., D.Litt. (Council), *King's College, Cambridge.*
Butcher, Prof. S. H., Litt.D., LL.D., D.Litt. (V.P.), 6, *Tavistock Square, W.C.*
Butler, Arthur J., *Wood End, Weybridge.*
Butler, H. E., *New College, Oxford.*
*Butler, The Rev. H. M., D.D., *Master of Trinity College, Cambridge.*
Buxton, F. W., 42, *Grosvenor Gardens, S.W.*
Buxton, Mrs. Alfred W., 32, *Great Cumberland Place, W.*
Buxton, Miss Victoria A., *Warlies, Waltham Abbey.*
Bywater, Prof. Ingram, Litt.D., D. Litt. (V.P.), 93, *Onslow Square, S.W.*
†Bywater, Mrs., 93, *Onslow Square, S.W.*
Callander, T., *Queen's University, Kingston, Canada.*
†Calvocoressi, L. M., *Messrs. Ralli Bros., Mellor's Bldgs., Exchange St. East, Liverpool.*
Campbell, Rev. Prof. Lewis, LL.D. (V.P.), 33, *Camden House Chambers, W.*
Campbell, Mrs. Lewis, 33, *Camden House Chambers, W.*
Capes, Rev. Canon W. W., *Addington, near West Malling.*
Carapáños, Constantin, Député, *Athens.*
Carey, Miss, c/o T. Brooksbank, Esq., *Belford Lodge, St. John's Road East, Putney, S.W.*
*Carlisle, A. D., *Haileybury College, Hertford.*
Carlisle, Miss Helen, *Houndhill, Marchington, Stafford.*
†Carmichael, Sir T. D. Gibson, *Castlecraig, Dolphinton, N.B.*
Carnford, F. M., *Trinity College, Cambridge.*
†Carr, Rev. A., *Addington Vicarage, Croydon.*
Carr, H. Wildon, 25, *Cumberland Terrace, Regent's Park, N.W.*
Carter, Prof. Frank, *McGill University, Montreal.*
Carter, Reginald, *Rector of Edinburgh Academy, Edinburgh.*
†Carthew, Miss, 15a, *Kensington Palace Gardens, W.*
Cartwright, T. B.,
Case, Miss Janet, 5, *Windmill Hill, Hampstead, N.W.*
Caton, Richard, *Holly Lea, Livingstone Drive South, Liverpool.*
Chambers, C. Gore, *Hertford House, de Parys Avenue, Bedford.*
Chambers, Charles D., *St. John's College, Battersea, S.W.*
Chambers, Edmund Kirchner, 9, *Lansdowne Crescent, W.*
Chance, Frederick, *New University Club, St. James's Street, S.W.*
Chapman, Rev. James, *Southlands, Battersea, S.W.*
Chavasse, A. S., *Edgeborough Lodge, Wellington College, Crowthorne, Berks.*
†Chawner, G., *King's College, Cambridge.*
†Chawner, W., *Master of Emmanuel College, Cambridge.*
Cheetham, J. Frederick, *Eastwood, Staleybridge.*
Christian, J. Henry, 18, *Devonshire Place, Portland Place, W.*
Christian, Rev. G., *Redgate, Uppingham.*
Christie, John, *Heuleigh, Kingston Hill.*
Christie, A. H., *The Bungalow, Ewell, Surrey.*
Christie-Miller, S. R., 21, *St. James's Place, W.*
Churchill E. L., *Eton College, Windsor.*

- Clark, Charles R. R., 20, *Cowley Street, Westminster, S.W.*
 Clark, J. W., *Scroope House, Cambridge.*
 †Clark-Maxwell, Rev. W. Gilchrist, *Clunbury Vicarage, Ashton-on-Clem, Salop.*
 Clarke, Somers, 48, *Albert Court, Kensington Gore, S.W.*
 †Clauson, A. C., 12, *Park Place Villas, Paddington, W.*
 Clay, C. F., 51, *Tavistock Square, W.C.*
 Clay, C. J., *West House, Cambridge.*
 Clerke, Miss Agnes, 68, *Redcliffe Square, S.W.*
 Clulow, G., 51, *Belsize Avenue, Hampstead, N.W.*
 Cobbold, Felix T., *The Lodge, Felixstowe, Suffolk.*
 *Cobham, C. Delaval, C.M.G., H.B.M. Commissioner, *Larnaca, Cyprus.*
 Cockerell, S. Pepys, 35, *Phillimore Gardens, Kensington, W.*
 Cole, A. C., 64, *Portland Place, W.*
 Colfox, William, *Westmead, Bridport.*
 Collins, Miss F. H., 3, *Bramham Gardens, South Kensington, S.W.*
 Colvin, Sidney (V.P.), *British Museum, W.C.*
 Compton, Rev. W. C., *The College, Dover.*
 Connal, B. M., *The Yorkshire College, Leeds.*
 Conway, Sir W. M., *The Ked House, 21, Hornton Street, W.*
 Conybeare, F. C., 13, *Norham Gardens, Oxford.*
 Cook, Arthur Bernard, *Queen's College, Cambridge.*
 Cook, E. T., 61, *Russell Square, W.C.*
 Cooke, Rev. A. H., *Aldenham School, Elstree, Herts.*
 Cooke, Richard, *The Croft, Detling, Maidstone.*
 Cookson, C., *Magdalen College, Oxford.*
 Cookson, Sir C. A., K.C.M.G., 96, *Cheyne Walk, S.W.*
 Corbet, His Honour Eustace K., *Native Court of Appeal, Cairo.*
 Cordery, J. G., C.S.I., 63, *Goldington Road, Bedford.*
 Corgialeagno, M., 53, *Mount Street, Berkeley Square, W.*
 Courtenay, Miss, 34, *Brompton Square, S.W.*
 Courtney, W. L., 53, *Belsize Park, N.W.*
 Cowper, The Right Hon. Earl, K.G., *Panshanger, Hertford.*
 Cowper, H. Swainson, *Yew Field, Hawkshead, Lancashire.*
 Crace, J. F., 15, *Gloucester Place, W.*
 Craik, George Lillie, 2, *West Halkin Street, S.W.*
 Crewdson, Wilson.
 Crommelin, Miss Constance de la Cherois, 5m, *Hyde Park Mansions, Marylebone Rd., W.*
 Cronin, Rev. H. S., *Trinity Hall, Cambridge.*
 Crooke, W., *Langton House, Charlton Kings, Cheltenham.*
 Crossman, C. Stafford, 67, *Porchester Terrace, W.*
 Crowfoot, J. W., *Turf Club, Cairo.*
 Cunliffe, R. J., 121, *West George Street, Glasgow.*
 Cust, Lionel, *The Crescent, Windsor.*
 Cust, Miss Anna Maria, 63, *Elm Park Gardens, Fulham Road, S.W.*
 Cust, Miss Beatrice, 13, *Eccleston Square, S.W.*
 Dabis, Miss, c/o Mrs. Mond, 20, *Avenue Road, Regent's Park, N.W.*
 Dakyns, H. G. (Council), *Higher Coombe, Haslemere, Surrey.*
 Dalton, Rev. Herbert A., *The School House, Felsted, Essex.*
 Daniel, A. M., *Filey Road, Scarborough.*
 Danson, F. C., B., *Liverpool and London Chambers, Liverpool.*
 Davidson, H. O. D., *Harrow, N.W.*
 Davidson, Miss A. M. Campbell, *Artillery Mansions, Victoria Street, S.W.*
 †Davies, Prof. G. A., *University College, Liverpool.*
 Davies, Rev. Gerald S., *Charterhouse, Godalming.*
 Dawkins, R. McG., *Emmanuel College, Cambridge.*
 Dawkins, Sir Clinton, K.C.B., 22, *Old Broad Street, E.C.*
 Dawson, Rev. A. P., *School House, Kibworth, Leicester.*
 †De Filippi, Madame, 2, *Green Street, Grosvenor Square, W.*

- De Saumarez, Lord, *Shrubland Park, Coddanham, Suffolk.*
 Devonshire, His Grace the Duke of, K.G., *Devonshire House, Piccadilly, W.*
 Dickens, G., *New College, Oxford.*
 Dickson, Miss Isabel A., *c/o Messrs. J. & W. Macdonald, Solicitors, Arbroath, N.B.*
 Dill, Prof. S., *Montpelier, Malone Road, Belfast.*
 Dobson, Miss, 77, *Harcourt Terrace, Redcliffe Square, S.W.*
 Donaldson, James, LL.D., *Principal of the University, St. Andrews.*
 Donaldson, Rev. S. A., *Eton College, Windsor.*
 D'Ooge, Prof. Martin L., *University of Michigan, Ann Arbor, U.S.A.*
 Douglas-Pennant, the Hon. Alice, *Mortimer House, Halkin Street, S.W.*
 Draper, W. H., 13, *Hammersmith Terrace, W.*
 Drummond, Allan, 7, *Ennismore Gardens, S.W.*
 Dryhurst, A. R., *British Museum, W.C.*
 Duchâtaux, M. V., 12, *Rue de l'Echauderie, à Reims.*
 Duff, Right Hon. Sir Mountstuart Grant, G.C.S.I., 11, *Chelsea Embankment, S.W.*
 Duff, Prof. J. Wight, *Durham College of Science, Newcastle-on-Tyne.*
 Duhn, Prof. von, *University, Heidelberg.*
 Du Pontet, C. A. A., *Tunstall House, Harrow-on-the-Hill.*
 Duke, Roger, 9, *Pelham Crescent, S.W.*
 Dunlap, Miss Mabel Gordon, *c/o Messrs. Brown, Shipley & Co., Founders Court, Lothbury, E.C.*
 Durning-Lawrence, Sir Edwin, Bart., M.P., 13, *Carlton House Terrace S.W.*
 Dyer, Louis (Council), *Sunbury Lodge, Banbury Road, Oxford.*
 Earp, F. R., *The Warren, Upper Warlingham, Surrey.*
 Edgar, C. C., *Turf Club, Cairo.*
 Edmonds, C. D., *Aldenham School, Elstree, Herts.*
 Edmonds, J. Maxwell, *Kings School, Canterbury.*
 Edwards, G. M., *Sidney Sussex College, Cambridge.*
 †Egerton, Sir Edwin H., G.C.B., H.B.M. Minister, *British Legation, Athens, Greece.*
 Egerton, Mrs. Hugh, 11, *Tite Street, Chelsea, S.W.*
 Eld, Rev. Francis J., *Polstead Rectory, Colchester.*
 Ellis, Prof. Robinson, *Trinity College, Oxford.*
 Elwell, Levi H., *Amherst College, Amherst, Mass., U.S.A.*
 Ely, Talfourd (Council), 13, *Well Road, Hampstead, N.W.*
 Eumorfopoulos, N., 33, *Gloucester Square, Hyde Park, W.*
 Evans, A. J., LL.D, D.Litt., F.R.S. (V.P.), *Ashmolean Museum, Oxford.*
 Evans, Sir John, K.C.B., D.C.L., F.R.S., *Nash Mills, Hemel Hempstead.*
 †Evans, Lady, (Council), *Nash Mills, Hemel Hempstead.*
 Eve, H. W., 37, *Gordon Square, W.C.*
 Ewart, Miss Mary A., 68, *Albert Hall Mansions, S.W.*
 Exeter, The Right Rev. The Lord Bishop of, D.D., *The Palace, Exeter.*
 Fairclough, Prof. H. R., *Stanford University, Cal., U.S.A.*
 Fanshawe, Reginald, 53, *Canynges Road, Clifton, Bristol.*
 Farnell, L. R., D. Litt., *Exeter College, Oxford.*
 Farrar, Rev. Canon A. S., D.D., *The College, Durham.*
 Farside, William, *Thorpe Hall, Robin Hood's Bay, Yorkshire.*
 Fegan, Miss E. S., *Templecrowe, Westcombe Park, Blackheath, S. E.*
 Felkin, F. W., *University College School, Gower Street, W.C.*
 Fenning, Rev. W. D., *Haileybury College, Hertford.*
 Field, Rev. T., D.D., *Radley College, Abingdon.*
 Firth, C. M., *Knowle, Ashburton, Devon.*
 Fisher, H. A. L., *New College, Oxford.*
 Flather, J. H., 52, *Bateman Street, Cambridge.*
 Fletcher, F., *The College, Marlborough.*
 Fletcher, H. M., 8, *Alexander House, St. Mary's Terrace, Paddington, W.*
 Fletcher, J. Banister, 29, *New Bridge Street, Ludgate Circus, E.C.*
 Foat, F. W. G., D. Litt., *City of London School, Victoria Embankment, E.C.*
 †Forbes, W. H., *Balliol College, Oxford.*

- Ford, Rev. Lionel, *Repton Hall, Burton-on-Trent.*
 Forster, E. M., *West Hackhurst, Abinger Hammer, Dorking.*
 Forster, E. S., *Woodhill, Crowthorne, Berks.*
 Fotheringham, J. K., *Magdalen College, Oxford.*
 Fowler, Harold N., Ph.D., *Western Reserve University, Cleveland, Ohio, U.S.A.*
 *Fowler, Rev. T., D.D., *President of Corpus Christi College, Oxford.*
 Fowler, W. Warde, *Lincoln College, Oxford.*
 Frazer, J. G., LL.D., D.Litt., D.C.L., *Trinity College, Cambridge.*
 Freeman, W. George, 163, *Parkdale Road, Plumstead.*
 *Freshfield, Douglas W. (Hon. Treasurer), 1, *Airlie Gardens, Campden Hill, W.*
 †Freshfield, Edwin, LL.D., 31, *Old Jewry, E. C.*
 Frost, K. T., *The College, Isleworth.*
 Fry, Rev. T. C., D.D., *The School, Great Berkhamstead.*
 Fry, Right Hon. Sir Edward, D.C.L., *Failand House, Failand, near Bristol.*
 Fry, F. J., *Cricket St. Thomas, Chard.*
 †Furley, J. S., *Chernocke House, Winchester.*
 Furneaux, L. R., *Rossall School, Fleetwood.*
 Furness, Miss S. M. M., 2, *Mycena Road, Blackheath, S.E.*
 Fyfe, Theodore, 4, *Gray's Inn Square, W.C.*
 Gardiner, E. Norman, *Epsom College, Surrey.*
 Gardner, Miss Alice, *The Old Hall, Newnham College, Cambridge.*
 †Gardner, Prof. Ernest A. (V.P.), *Tadworth, Surrey.*
 *‡Gardner, Prof. Percy, Litt.D. (V.P.), 12, *Canterbury Road, Oxford.*
 Gardner, Samuel, *Oakhurst, Harrow-on-the-Hill.*
 Gardner, W. Amory, *Groton, Massachusetts, U.S.A.*
 Garnett, Mrs. Terrell, 3, *Queen Anne's Gate, S.W.*
 Garrod, H. W., *Corpus Christi College, Oxford.*
 Gaselee, S., *King's College, Cambridge.*
 Gatliff, Hamilton, 11, *Eaton Square, S.W.*
 Geikie, Sir Archibald, F.R.S., Sc.D., D.C.L., 10, *Chester Terrace, Regent's Park, N.W.*
 Genner, E., *Jesus College, Oxford.*
 Gex, R. O. de, *Clifton College, Bristol.*
 Gibson, Mrs. Margaret D., *Castle-brae, Chesterton Road, Cambridge.*
 Giles, P., *Emmanuel College, Cambridge.*
 Gilkes, A. H., *The College, Dulwich, S.E.*
 Gillespie, A. M., 15, *Regent's Park Avenue, Hyde Park, Leeds.*
 Gilliat, Rev. E., *The Grange, Bitton, Bristol.*
 Giveen, R. L., 66, *Myddleton Square, Clerkenwell, E.C.*
 Glover, Miss Helen, 13, *Chelsea Gardens, Chelsea, S.W.*
 Godden, Miss Gertrude M., *Ridgfield, Wimbledon.*
 Goodhart, A. M., *Eton College, Windsor.*
 Goodison, Mrs., 1, *Beach Lawn, Waterloo, Liverpool.*
 Goodspeed, Edgar J., *The University, Chicago, U.S.A.*
 Goodwin, Prof. W. W., D.C.L., *Cambridge, Mass., U.S.A.*
 Gosford, The Countess of, 23, *Mansfield Street, Cavendish Square, W.*
 Gow, Rev. James, Litt.D. (Council), 19, *Dean's Yard, Westminster, S.W.*
 Gower, Lord Ronald, *Hammerfield, Penshurst, Kent.*
 Granger, F. S., *University College, Nottingham.*
 Graves, A. S., *St. Martin's, Cambridge.*
 Gray, Rev. H. B., *Bradfield College, Berks.*
 Green, G. Buckland, *The Academy, Edinburgh.*
 Green, Mrs. J. R., 36, *Grosvenor Road, S.W.*
 Greene, C. H., *The School, Great Berkhamstead.*
 Greene, Herbert W., *Magdalen College, Oxford.*
 Greenwell, Rev. W., F.R.S., *Durham.*
 Grenfell, B. P., Litt.D., D.Litt. (Council), *Queen's College, Oxford.*
 Griffith, F. Ll., *Riversdale, Ashton-under-Lyne.*
 Griffith, Miss Mary E., 4, *Bramham Gardens, S.W.*

- Grundy, George Beardoe, D.Litt., 27, *St. Margaret's Road, Oxford*.
- Gurney, Gerald, 2, *Manderhill Place, W.*
- Gurney, Miss Amelia, 69, *Ennismore Gardens, S.W.*
- †Gutch, Clement, *Kings College, Cambridge*.
- Hadow, W. H., *Worcester College, Oxford*.
- Haigh, A. E., 4, *Norham Gardens, Oxford*.
- Hall, Rev. F. H., *Oriel College, Oxford*.
- Hall, Rev. F. J., *Northaze Place, Potter's Bar, Herts.*
- Hall, F. W., *St. John's College, Oxford*.
- Hall, Harry Reginald, *British Museum, W.C.*
- Hall, Miss S. E., 10, *Gardner Mansions, Church Row, Hampstead*.
- Hallam, G. H., *The Park, Harrow, N.W.*
- Hambidge, Jay.
- †Hammond, B. E., *Trinity College, Cambridge*.
- Hardie, Prof. W. Ross, *The University, Edinburgh*.
- Harding, G. V., *Pentwyn, near Monmouth*.
- Hardy, F. A., *Scot House, Kinnear Road, Edinburgh*.
- Harper, Miss Barbara, *Queen's College, 43, Harley Street, W.*
- Harris, H. B., 37, *Kensington Square, W.*
- Harris, Prof. William Fenwick, 8, *Mercer Circle, Cambridge, Mass., U.S.A.*
- †Harrison, Ernest, *Trinity College, Cambridge*.
- †Harrison, Miss J. E., LL.D., D.Litt. (Council), *Newtonham College, Cambridge*.
- Harrison, Miss L., *Elleray, Linnet Lane, Liverpool*.
- Harrower, Prof. John, *The University, Aberdeen*.
- Hart, H. G.
- Hart, J. H. A., *St. John's College, Cambridge*.
- Hart-Smith, Rev. T. A., *Epsom College, Surrey*.
- Haslam, S., *The School, Uppingham*.
- Hasluck, F. W., *The Wilderness, Southgate, N.*
- Haussoullier, B., 8, *Rue Sainte-Cécile, Paris*.
- †Haverfield, F. J., *Christ Church, Oxford*.
- Hawes, C. H., *Trinity College, Cambridge*.
- Hawes, Miss E. P., 89, *Oxford Terrace, W.*
- †Hay, C. A., 127, *Harley Street, W.*
- Haynes, E. S. P., 9, *New Square, Lincoln's Inn, W.C.*
- Hayter, Angelo G. K., 4, *Forest Rise, Walthamstow, Essex*.
- Head, Barclay Vincent, D.C. L., *British Museum, W.C.*
- Head, John Alban, 6, *Clarence Terrace, N.W.*
- Headlam, C. E. S., 4, *Smith Square, Westminster, S.W.*
- Headlam, J. W. 1, *Benet Place, Cambridge*.
- Headlam, W. G., *Kings College, Cambridge*.
- Heard, Rev. W. A., *Fettes College, Edinburgh*.
- †Heathcote, W. E., *Cleevehurst, Stoke Poges, near Slough*.
- Heberden, C. B., *Principal of Brasenose College, Oxford*.
- Hedgcock, Mrs. Harrison, 21, *Caversham Road, N.W.*
- Henderson, Arthur E., *c/o the Architectural Association, 58, Great Marlborough St., W.*
- Henderson, Bernard W., *Exeter College, Oxford*.
- Hereford, The Lord Bishop of, *The Palace, Hereford*.
- †Hertz, Miss Henriette, *The Poplars, 20, Avenue Road, N.W.*
- Hewitt, J. F., *Holton Cottage, Oxford*.
- Heyer, G., *Kings College School, Wimbledon, S.W.*
- Higgins, Alfred, 16, *King Street, Portman Square, W.*
- Hill, George F. (Council), *British Museum, W.C.*
- Hirst, Miss Gertrude, *Barnard College, New York City*.
- Hobson, Ernest, *Tipton Elms, Sheffield*.
- Hodgkin, Thomas, D.C.L., Litt. D., *Barmoor Castle, Beal, Northumberland*.
- Hodgson, F. C., *Abbotsford Villa, Twickenham*.
- Hogarth, David G. (Council), *Savile Club, 107, Piccadilly, W.*

- Holiday, Henry, *Oak Tree House, Branch Hill, Hampstead N.W.*
Holland, Miss Emily, 24, *Homefield Road Wimbledon.*
Hopkinson, J. H., *The University, Birmingham.*
Hoppin, J. C., *Bryn Mawr College, Bryn Mawr, Pa., U.S.A.*
Hornby, Rev. J. J., D.D., *Provost of Eton College, Windsor.*
Horner, J. F. F., 9, *Buckingham Gate, S.W.*
†Hort, Sir Arthur F., Bart., *Garlands, Harrow.*
Hose, H. F., *Dulwich College, Dulwich, S.E.*
Hoste, Miss M. R., *St. Augustine's, Blackwater Road, Eastbourne.*
House, H. H., *The College, Malvern.*
Housley, Samuel J., *Gynsdal, Waterloo Road, Epsom.*
How, W. W., *Merton College, Oxford.*
Howorth, Sir Henry H., K.C.I.E., F.R.S., 30, *Collingham Place, S.W.*
Huddart, Rev. G. A. W., *Kirklington Rectory, Bedale, Yorks.*
Huddilston, J. H., Ph.D., *The University of Maine, Orono, Maine, U.S.A.*
Hudson, William T., *University College, Bangor.*
Hügel, Baron Friedrich von, 4, *Holford Road, Hampstead, N.W.*
Hulse, Miss Caroline M.,
Hunt, A. S., D.Litt. (Council), *Queen's College, Oxford.*
Hutchinson, Sir J. T., Chief Justice of Cyprus, *Nicosia, Cyprus.*
Hutchinson, Miss W. M. L., *River House, Upper Mall, Hammersmith, W.*
Hutton, Miss C. A., 49, *Drayton Gardens, S.W.*
Image, Selwyn, 20, *Fitzroy Street, W.C.*
Jackson, Rev. Blomfield, 29, *Mecklenburgh Square, W.C.*
Jackson, Henry, Litt.D., *Trinity College, Cambridge.*
Jackson, Mrs. F. H., 74, *Rutland Gate, S.W.*
Jackson, Rev. W. W., *Rector of Exeter College, Oxford.*
*James, The Rev. H. A., D.D., *School House, Rugby.*
James, H. R., *The University, Calcutta.*
James, Lionel, *St. Peter's College, Radley, Abingdon.*
Janvier, Mrs. Thomas A., *c/o Brown, Shipley and Co., 123, Pall Mall, S.W.*
Jeans, Rev. G. E., *Shorwell, Newport, Isle of Wight.*
*Jebb, Sir Richard, D.C.L., LL.D., Litt.D., M.P. (President), *Springfield, Newnham, Cambridge.*
Jenkinson, F. J. H., *Trinity College, Cambridge.*
Jenner, Miss Lucy A., 39, *Addison Road, Kensington, W.*
Jevons, F. B., *The Castle, Durham.*
Jex-Blake, Miss, *Girton College, Cambridge.*
Joachim, Miss M., *Highlands, Haslemere, Surrey.*
Jonas, Maurice, 9, *Bedford Square, W.C.*
†Jones, H. Stuart, *Trinity College, Oxford.*
Jones, W. H. S., *The Perse School, Cambridge.*
Judge, Max, 7, *Pall Mall, S.W.*
Karo, George, *Akademisches Kunstmuseum, Bonn a/Rhein.*
Keene, Prof. Charles H., *University Club, Dublin.*
Keith, A. Berriedale, *Colonial Office, Downing Street, S.W.*
Kelly, Charles Arthur, 30, *Cheyne Walk, Chelsea, S.W.*
Keltie, J. S., LL.D., *Glendevon House, Compayne Gardens, Hampstead, N.W.*
Kempthorne, Rev. P. H., *Wellington College, Berks.*
Kennedy, J., 12, *Frognaal Lane, Finchley Road, N.W.*
Kensington, Miss Frances, 83, *Gloucester Terrace, Hyde Park, W.*
Kenyon, F. G., D.Litt. (Council), *British Museum, W.C.*
Ker, Prof. W. P., 95, *Gower Street, W.C.*
Kerr, Prof. Alexander, *Madison, Wisconsin, U.S.A.*
Keser, Dr. J., *Colatel, Chemin Vinet, Lausanne.*
Kettlewell, Rev. P. W. H., 1, *Albert Road, Clifton, Bristol.*
Kieffer, Prof. John B., *College Avenue, Lancaster, Pa., U.S.A.*
King, J. E., *Grammar School, Bedford.*

- King, Rev. J. R., *St. Peter's Vicarage, Oxford*.
 King, Mrs. Wilson, 19, *Highfield Road, Edgbaston, Birmingham*.
 Knowles, James, *Queen Anne's Lodge, St. James' Park, S.W.*
 Köhler, Olivia C., 65, *Brondesbury Road, N.W.*
 Lane, Mrs. Charles T., *Dangstein, Petersfield*.
 Lang, Andrew, LL.D., 1, *Marloes Road, Kensington, W.*
 *Lang, Sir R. Hamilton, K.C.M.G., *The Grove, Dedham, Essex*.
 Langdon-Davies, B. N., *Copt Hill, Burgh Heath, Surrey*.
 Langton, Neville, *Belle Vue House, Côtel, Guernsey*.
 Lathbury, Miss, 19, *Lingfield Road, Wimbledon, S.W.*
 La Touche, C. D., 53, *Raglan Road, Dublin*.
 †Lansdowne, The Most Hon. the Marquess of, K.G., G.C.S.I., G.C.I.E., G.C.M.G.,
Bowood, Calne, Wilts.
 Latour, Miss de, 178, *Earl's Court Road, S.W.*
 Leaf, Herbert, *The Green, Marlborough*.
 †Leaf, Walter, Litt.D. (V.P.), 6, *Sussex Place, Regent's Park, N.W.*
 Lecky, Mrs., 38, *Onslow Gardens, S.W.*
 Lehn, The Baroness Rosenörn—, *Hirdkilde, Svendborg, Denmark*.
 Leeper Alexander, *Warden of Trinity College, Melbourne*.
 Lee-Warner, Miss Evelyn, *Lynwode, Godalming*.
 Legge, F., 6, *Gray's Inn Square, W.C.*
 Leigh, Rev. A. Austen, *Provost of King's College, Cambridge*.
 Leigh, H. D., *Corpus Christi College, Oxford*.
 Leigh, W. Austen, 2, *Norfolk Crescent, Hyde Park, W.*
 Lewis, Harry R., 5, *Argyll Road, Kensington, W.*
 †Lewis, Mrs. S. S., *Castle-brae, Chesterton Road, Cambridge*.
 Leycester, Mrs. Rafe, 6, *Cheyne Walk, S.W.*
 Lindley, Miss Julia, 10, *Kidbrook Terrace, Shooter's Hill Rd., S.E.*
 Lingen, The Right Hon. Lord, K.C.B., 13, *Wetherby Gardens, S.W.*
 Lingen, Lady, 13, *Wetherby Gardens, S.W.*
 Lister, Hon. Reginald, *British Legation, Copenhagen*.
 Lloyd, Miss A. M., *Caythorpe Hall, Grantham*.
 †Lock, Rev. W., D.D., *Keble College, Oxford*.
 †Loeb, James, 37, *East 38th Street, New York*.
 Loeschcke, Dr. von, *Universität, Bonn*.
 Longman, Miss Mary, *Girton College, Oxford*.
 Lorimer, Miss H. L., *Somerville College, Oxford*.
 †Loring, William (Council), *County Hall, Wakefield*.
 Luce, Rev. E., 9, *Royal Crescent, Brighton*.
 Lunn, Henry S., M.D., *Oldfield House, Harrow-on-the-Hill*.
 Lunn, W. Holdsworth, 5, *Endsleigh Gardens, N.W.*
 Lupton, Rev. J. M., *The College, Marlborough*.
 Lyttelton, Hon. and Rev. E., *Haileybury College, Hertford*.
 *Macan, R. W., *University Collège, Oxford*.
 McAnally, H. W. W., *War Office, Pall Mall, S.W.*
 McArthur, A. G., 28, *Linden Gardens, W.*
 McDaniel, J. H., *Hobart College, Geneva, N.Y.*
 McDougall, Miss Eleanor, *Willow Lodge, Moss Lane, East Manchester*.
 McDowall, Miss Katherine Ada, 166, *Holland Road, Kensington, W.*
 Macdonald, George (Council), *The University, Glasgow*.
 Macdonald, Miss Louisa, *Women's College, Sydney University, Sydney, N.S.W.*
 Macdonell, W. R., LL.D., *Bridgefield, Bridge of Don, Aberdeenshire*.
 MacEwen, Rev. Prof. Alex. Robertson, 5, *Doune Terrace, Edinburgh*.
 Macgillivray, J. Pittendrigh, *Ravelstow Elms, Murrayfield, Edinburgh*.
 MacIver, D. Randall, *Wolverton House, Clifton, Bristol*.
 Mackechnie, W. W. 150, *Byres Road, Glasgow*.
 McKechney, Mrs. W. C., 3, *Berkeley Place, Wimbledon, S.W.*
 McKerrow, Miss, *The Avenne, Brondesbury, N.W.*

- Mackenzie, Duncan, 34, *Via Monte Giordano, Rome*.
 Mackenzie, R. J., 12, *Great Stuart Street, Edinburgh*.
 MacLehose, James J., 61, *St. Vincent Street, Glasgow*.
 Macmillan, Mrs. Alexander, *Bramshott Chase, Shottermill, Surrey*.
 *Macmillan, George A., D.Litt. (Hon. Sec.), *St. Martin's Street, W.C.*
 Macmillan, Mrs. George A., 19, *Earls Terrace, Kensington, W.*
 Macmillan, Maurice, 52, *Cadogan Place, S.W.*
 †Macmillan, W. E. F., *King's College, Cambridge*.
 †Macnaghten, Hugh, *Eton College, Windsor*.
 Macnaghten, The Right Hon. Lord, 3, *New Square, Lincoln's Inn, W.C.*
 Macculloch, Mrs. Matilda,
 †Magrath, Rev. J. R., *Provost of Queen's College, Oxford*.
 *Mahaffy, Rev. J. P., D.D., D.C.L., *Trinity College, Dublin*.
 Mair, Prof. A. W., *The University, Edinburgh*.
 Malden, R. H., *King's College, Cambridge*.
 †Malim, F. B., *Marlborough College, Wilts*.
 Mallet, P. W., 25, *Highbury New Park, N.*
 Manatt, Prof. Irving, *Brown University, Providence, R.I., U.S.A.*
 †Marindin, G. E. (Council), *Chesterton, Bridgnorth, Salop*.
 *Marquand, Prof. Allon, *Princeton College, New Jersey, U.S.A.*
 Marsh, E., 3, *Gray's Inn Place, W.C.*
 Marshall, Miss, *Far Cross, Woore, Newcastle, Staffs*.
 Marshall, Frederick, *British Museum, W.C.*
 Marshall, J. H., *Ravensdale, Simla, India*.
 Marshall, John, *Lewes House, Lewes*.
 Marshall, Prof. J. W., *University College of Wales, Aberystwyth*.
 Marshall, R., 31, *The Waldrons, Croydon*.
 Marshall, T., *Highfield, Chapel Allerton, Leeds*.
 Martin, Charles B., *The College, Oberlin, Ohio, U.S.A.*
 †Martin, R. B., M.P., 10, *Hill Street, W.*
 †Martyr Edward, *Tillyra Castle, Ardahan, County Galway*.
 Massy, Lieut.-Colonel P. H. H., *H.M.V. Consulate, Mersina, Asia Minor*.
 Matheson, P. E., *New College, Oxford*.
 Mavrogordato, J., *Exeter College, Oxford*.
 Mavrogordato, Pandeli A., 1, *King's Arms Yard, Moorgate Street, E.C.*
 Mayor, H. B., *Clifton College, Bristol*.
 Mayor, Rev. Prof. Joseph B., *Queensgate House, Kingston Hill, Surrey*.
 Mayor, R. J. G. (Council), *Board of Education, Whitehall, S.W.*
 Measures, A. E., *King Edward VI. School, Birmingham*.
 Merry, Rev. W. W., *Rector of Lincoln College, Oxford*.
 Methuen, A. M. S., *New Place, Haslemere*.
 Miller, William, 10, *Cheyne Gardens, Chelsea, S.W.*
 Milliet, P., 95, *Boulevard St. Michel, Paris*.
 Millington, Miss M. V., 1, *St. Anne's Villas, Holland Park Avenue, W.*
 Milne, J. Grafton, *Mansfield House, Canning Town, E.*
 Milner, His Excellency Viscount, G.C.B., *Government House, Pretoria, S. Africa*.
 Minet, Miss Julia, 18, *Sussex Square, Hyde Park, W.*
 Minns, Ellis H., *Pembroke College, Cambridge*.
 Minturn, Miss L. T., 14, *Chelsea Embankment, S.W.*
 †Mocatta, F. D., 9, *Connaught Place, Edgware Road, W.*
 Moline, Miss I. P., 172, *Church Street, Stoke Newington, N.*
 †Mond, Mrs. Frida, *The Poplars, 20, Avenue Road, Regent's Park, N.W.*
 Monro, D. B., Litt.D., LL.D. (V.P.), *Provost of Oriel College, Oxford*,
 Monson, His Excellency the Right Hon. Sir E. J., G.C.B., G.C.M.G., H.B.M.
 Ambassador, *British Embassy, Paris*.
 Moore, B. P., 75, *Holland Road, Kensington, W.*
 Morgan, Prof. J. Morris, *Harvard College, Cambridge, Mass, U.S.A.*
 Morgan, Miss, 64, *Scarsdale Villas, Kensington, W.*

- Morice, Rev. F. D., *Mount-Hermon, Woking*.
- *Morley, The Right Hon. the Earl of, 31, *Prince's Gardens, S.W.*
- †Morshead, E. D. A., *The College, Winchester*.
- Moss, The Rev. H. W., *The School House, Shrewsbury*.
- Mount, Rev. C. B., 14, *Norham Road, Oxford*.
- †Mount, J. T., *Eton College, Windsor*.
- Moxon, Rev. T. Allen, 106, *Goldsmith Street, Nottingham*.
- †Munro, J. A. R., *Lincoln College, Oxford*.
- Murray, A. S., LL.D. (V.P.), *British Museum, W.C.*
- Murray, G. G. A., *Barford, Churt, Farnham*.
- †Myers, Ernest (Council), *Brackenside, Chislehurst*.
- *Myres, J. Linton (Council), *Christ Church, Oxford*.
- Naef, Conrad, J., *The Admiralty, S.W.*
- †Nairn, Rev. J. Arbuthnot, *Merchant Taylors' School, E.C.*
- Newinan, W. L., Litt.D., *Pittville Lawn, Cheltenham*.
- Nicholson, Sir Charles, Bart., *The Grange, Totteridge, Herts.*
- Noack, Prof. Ferdinand, *Oberer Philosophenweg, 6, Jena*.
- Northampton, The Most Hon. the Marquis of, 51, *Lennox Gardens, S.W.*
- Odgers, Rev. J. Edwin, D.D., 145, *Woodstock Road, Oxford*.
- Ogilvy, Miss Alison, 12, *Prince Edward's Mansions, Pembroke Square, W.*
- Ommanney, Admiral Sir Erasmus K., 29, *Connaught Square, W.*
- Osgood, Hamilton, M.D., 388, *Beacon Street, Boston, U.S.A.*
- Page, T. E., *Charterhouse, Godalming*.
- Pallis, Alexander, *Tatoř, Aigburgh Drive, Liverpool*.
- Parry, Rev. O. H., *Inglehope, Cranmer Road, Cambridge*.
- Parry, Rev. R. St. J., *Trinity College, Cambridge*.
- Paton, James Morton, *Westleyan University, Middletown, Conn., U.S.A.*
- Paton, W. R., *Maison Camus, Place Marc, Viroflay, Seine-et-Oise, France*.
- Paton, J. Lewis, *Grammar School, Manchester*.
- Payne-Smith, Rev. W. H., 10, *Hillmorton Road, Rugby*.
- Pearmain, S. B., 388, *Beacon Street, Boston, U.S.A.*
- Pears, Edwin, 2, *Rue de la Banque, Constantinople*.
- Peckover, Alexander, *Wisbech, Cambs.*
- Peckover, Miss Alexandrina, *Bank House, Wisbech*.
- Peers, C. R., 96, *Grosvenor Road, S.W.*
- Peile, John, Litt.D., *Master of Christ's College, Cambridge*.
- Pelham, Hon. Mrs. Arthur, 15, *Duke Street, Manchester Square, W.*
- Pelham, Professor H. F. (V.P.), *President of Trinity College, Oxford*.
- Pember, E. H., K.C., *Vicar's Hill, near Lymington, Hants*.
- Penrose, Miss Emily (Council), *Royal Holloway College, Englefield Green, S.O., Surrey*.
- †Percival, F. W., 2, *Southwick Place, Hyde Park Square, W.*
- Perkins, O. T., *Wellington College, Berks.*
- Perry, Prof. Edward Delavan, *Columbia University, New York City, U.S.A.*
- Pesel, Miss Laura, *Oak House, Bradford*.
- Phillips, Mrs. Herbert, *Sutton Oaks, Macclesfield*.
- Phillimore, Prof. J. S., *The University, Glasgow*.
- Philpot, Hamlet S., *The County School, Baltimore, Maryland, U.S.A.*
- Pinckney, A. B., 95, *High Street, Worcester*.
- †Platt, Prof. Arthur, 5, *Chester Terrace, N.W.*
- Pogson-Smith, W. G., *St. John's College, Oxford*.
- Pollard, A. T., *City of London School, Victoria Embankment, E.C.*
- Pollock, Sir Frederick, Bart., 48, *Great Cumberland Place, W.*
- †Pope, Mrs. G. H., 60, *Banbury Road, Oxford*.
- †Postgate, Prof. J. P., Litt.D., *Trinity College, Cambridge*.
- Powell, Sir F. S., Bart., M.P., 1, *Cambridge Square, Hyde Park, W.*
- Powell, John U., *St. John's College, Oxford*.
- Poynter, Sir Edward J., Bart., Litt.D., D.C.L., P.R.A., 28, *Albert Gate, S.W.*
- Preece, Sir William H., *Gothic Lodge, Wimbledon Common, S.W.*

- Pretor A., 2, *Camden Place, Wyle, Weymouth.*
 Price, Miss Mabel, *Charlton, Headington, Oxford.*
 Prickard, A. O., *New College, Oxford.*
 Proctor, R. G. C., *British Museum, W.C.*
 Prothero, Henry, 13, *Promenade, Cheltenham.*
 †Pryor, Francis R., *Woodfield, Hatfield, Herts.*
 Psychari, A., 38, *Boulevard de Courcelles, Paris.*
 Quibell, Mrs. Annie A., *Gizeh Museum, Egypt.*
 Radcliffe, W. W., *Fonthill, East Grinstead, Sussex.*
 †Raleigh, Miss Katherine, A., *Beechwood, Loudwater, Bucks.*
 *Ralli, Pandeli, 17, *Belgrave Square, S.W.*
 †Ralli, Mrs. Stephen A., *St. Catherine's Lodge, Hove, Sussex.*
 Ramsay, Prof. G. G., *The University, Glasgow.*
 †Ramsay, Prof. W. M., D.C.L., Litt.D. (V.P.), *The University, Aberdeen.*
 Ransome, Miss C. L., *c/o Messrs. Brown, Shipley and Co., 123, Pall Mall, S.W.*
 Rawlins, F. H., *Eton College, Windsor.*
 Rawnsley, W. F., *Loughrigg Holme, Ambleside.*
 Reade, Essex E., 24, *Bolton Street, Mayfair, W.*
 Reece, Miss Dora, 26, *Bullingham Mansion, Pitt Street, Kensington, W.*
 Reid, Prof. J. S., Litt.D., *Caius College, Cambridge.*
 †Reinach, Salomon, 31, *Rue de Berlin, Paris.*
 Rendall, Rev. F., 82, *Philbeach Gardens, S.W.*
 †Rendall, Rev. G. H., Litt.D., *Charterhouse, Godalming.*
 †Rendall, Montague, *The College, Winchester.*
 Richards, Rev. G. C. (Council), *Oriel College, Oxford.*
 Richards, F., *Kingswood School, Bath.*
 Richards, H. P., *Wadham College, Oxford.*
 Richmond, Sir W. B., K.C.B., D.C.L., R.A., *Bevor Lodge, West End, Hammersmith, W.*
 Ridgeway, Prof. W. (Council), *Fen Ditton, Cambridge.*
 Ridley, Sir Edward, *Crabbet Park, Crawley, Sussex.*
 Rigg, Herbert A., 13, *Queen's Gate Place, S.W.*
 Robb, Mrs., 46, *Rutland Gate, S.W.*
 Roberts, Rev. E. S., *Master of Caius College, Cambridge.*
 Roberts, J. Slingsby, 13, *Old Square, Lincoln's Inn, W.C.*
 Roberts, Principal T. F., *Sherborne House, Aberystwith.*
 Roberts, Professor W. Rhys, *University College of North Wales, Bangor.*
 Robertson, Miss Hilda, 57, *Harrington Gardens, W.*
 Robinson Edward, *Director of Museum of Fine Arts, Boston, Mass. U.S.A.*
 Robinson, G. G., *Hill Side, Godalming.*
 Robinson, T. P. G., *Ashfield, Rothsay Place, Bedford.*
 Robinson, W. S., 53, *Courtfield Gardens, Kensington, W.*
 Rodd, Sir Rennell, K.C.M.G., 17, *Stratford Place, W.*
 Rogers, Benjamin Bickley, *Eastwood, Strawberry Hill, Twickenham.*
 Rome, W., *Crecksea Place, Burnham-on-Crouch.*
 †Rosebery, The Right Hon. the Earl of K.G., 38, *Berkeley Square, W.*
 Ross, W. D., *Oriel College, Oxford.*
 Rotton, Sir J. F., *Lockwood, Frith Hill, Godalming, Surrey.*
 Rous, Lieut.-Colonel, *Worstead House, Norwich.*
 †Rouse, W. H. D., Litt.D., 16, *Brookside, Cambridge.*
 Ruben, Paul, 39, *Lexham Gardens, Kensington, W.*
 Rubie, Rev. Alfred E., *The Royal Naval School, Eltham, S.E.*
 Rücker, Miss S. C., 4, *Vanbrugh Terrace, Blackheath, S.E.*
 Rücker, Principal Sir A. W., D.Sc., F.R.S., 19, *Gledhow Gardens, S. Kensington, S.W.*
 Runtz, Ernest, 11, *Walbrook, E.C.*
 Rustafjaell, R. de, 1, *Down Street, Piccadilly, W.*
 Rutherford, Rev. W. Gunion, LL.D., *Little Hallonds, Bishopstone, Lewes.*
 Sambon, M. Arthur, 6, *Rue de Port Mahon, Paris.*
 Samuel, Mrs. Sylvester, 80, *Onslow Gardens, S.W.*

- Sanborn, F. B., *Concord, Mass., U.S.A.*
 †Sandys, J. E., Litt.D. (V.P.), *St. John's College, Cambridge.*
 †Sandys, Mrs., *Merton House, Cambridge.*
 †*Sayce, Rev. Prof. A. H., LL.D. (V.P.), 8, *Chalmers Crescent, Edinburgh.*
 †Scaramanga, A. P., 18, *Barkston Gardens, Kensington, S.W.*
 Schilizzi, John S., 31, *Cromwell Road, S. Kensington, S.W.*
 Schultz, R. Weir, 6, *Mandeville Place, W.*
 Schuster, Ernest, 12, *Harrington Gardens, S.W.*
 Scouloudi, Stephanos, *Athens, Greece.*
 Scull, Miss Sarah A., *Smethport, McKean Co., Pa., U.S.A.*
 Seaman, Owen, *Tower House, West Hill, Putney, S.W.*
 Secker, W. H., *Aysgarth School, Newton-le-Willows, R.S.O., Yorks.*
 Seebohm, Hugh, *The Hermitage, Hitchin.*
 Seltman, E. J., *Kinghoe, Great Berkhamsted, Herts.*
 †Selwyn, Rev. E. C., D.D., *School House, Uppingham.*
 †Sendall, Sir Walter J., G.C.M.G., 91, *Cornwall Gardens, S.W.*
 Seymour, Prof. Thomas D., *Yale College, Newhaven, U.S.A.*
 Shadwell, C. L., D.C.L., *Oriel College, Oxford.*
 Sharkey, J. A., *Christ's College, Cambridge.*
 Sharpe, Miss Mary H., *Harold House, Lansdowne Road, W.*
 Sharpe, Miss Catherine, *Stoneycroft, Elstree, Herts.*
 Sherwell, John W., *Sadler's Hall, Cheapside, E.C.*
 Shewan, Alexander, *Seehof, St. Andrews, Fife.*
 Shipley, H. S., H.B.M. Consul, *British Legation, Cetinje.*
 Shove, Miss E., 25, *St. Mark's Crescent, Regent's Park, N.W.*
 Shuckburgh, E. S., Litt.D., *Granchester, Cambridge.*
 Sidgwick, Arthur, *Corpus Christi College, Oxford.*
 Sikes, Edward Ernest (Council), *St. John's College, Cambridge.*
 Silcox, Miss, *High School for Girls, West Dulwich, S.E.*
 Simpson, H. B., 18, *Brompton Square, S.W.*
 †Sing, J. M., *S. Edward's School, Oxford.*
 *Skrine, Rev. J. H., *Itchen Stoke Rectory, Alresford, Hants.*
 Slater, Howard, *Waiki, New Zealand.*
 Slinger, Miss Ealie, *Three Elms, Lancaster.*
 Sloane, Miss Eleanor, 13, *Welford Road, Leicester.*
 †Smith, A. Hamilton (Council), 22, *Endsleigh Street, W.C.*
 Smith, Cecil, LL.D. (Council), 18, *EarPs Terrace, Kensington, W.*
 Smith, F. E. J., 2, *Tunfield Court, Inner Temple, E.C.*
 †Smith, Prof. Goldwin, *The Grange, Toronto, Canada.*
 Smith, H. Babington, C.S.I., *General Post Office, St. Martin's-le-Grand, E.C.*
 Smith, R. Elsey, 7, *Gordon Street, Gordon Square, W.C.*
 Smith, Reginald J., K.C., 11, *Hyde Park Street, W.*
 Smith, S. C. Kaines, 3, *Wymering Mansions, Elgin Avenue, W.*
 †Snow, T. C., *St. John's College, Oxford.*
 †Somerset, Arthur, *Castle Goring, Worthing.*
 Sonnenschein, Prof. E. A., 7, *Barnsley Road, Birmingham.*
 †Southwell, The Right Rev. the Bishop of, *Thurgarton Priory, Southwell.*
 Sowels, F., *The Rookery, Thetford, Norfolk.*
 Spiers, Phené, *Carlton Chambers, 12, Regent Street, W.*
 Spilsbury, A. J., *City of London School, Victoria Embankment, E.C.*
 Spooner, Rev. W. A., *Warden of New College, Oxford.*
 Stanford, C. Thomas, 3, *Ennismore Gardens, S.W.*
 Stannus, Hugh, 32, *Highbury Place, N.*
 Stanton, Charles H., *Field Place, Stroud, Gloucestershire.*
 Statham, H. Heathcote, 40, *Gower Street, W.C.*
 †Stawell, Miss F. Melian, 44, *Westbourne Park Villas, W.*
 Steel, Charles G., *Barby Road, Rugby.*
 Steele, D., 23, *Homer Street, Athens.*

- Steele, Dr., 2, *Via Pico della Mirandola, Florence.*
 Steele, Mrs. D., 23, *Homer Street, Athens.*
 Stevenson, F. S., M.P., 5, *Ennismore Gardens, S.W.*
 †Stevenson, Miss E. C., 13, *Randolph Crescent, Edinburgh.*
 Stevenson, Miss E. F., *Eltham Court, Eltham, Kent.*
 Stewart, Prof. J. A., *Christ Church, Oxford.*
 Stewart, Mrs. H. F., *The Malting House, Cambridge.*
 Stogdon, Rev. Edgar, *Harrow, N.W.*
 Stogdon, J., *Harrow, N.W.*
 Stone, E. W., *Eton College, Windsor.*
 Stone, Rev. E. D., *Abingdon.*
 Storey-Maskelyne, N. H. W., F.R.S., *Basset Down House, Wroughton, Swindon.*
 Storr, Rev. Vernon F., *Branshott Rectory, Liphook, Hants.*
 Strachan-Davidson, J. L., *Balliol College, Oxford.*
 Stretton, Gilbert W., *The College, Dulwich, S.E.*
 Strong, Mrs. S. Arthur, LL.D. (Council).
 Struthers, John, C.B., *Dover House, Whitehall, S.W.*
 Sturgis, Julian R., 16, *Hans Road, S.W.*
 Sturgis, Russell, 307, *East 17th Street, New York.*
 Surr, Watson, 57, *Old Broad Street, E.C.*
 †Tait, C. W. A., *Clifton College, Bristol.*
 Tancock, Rev. C. C., D.D., *The School House, Tonbridge.*
 Tarbell, Prof. F. B., *University of Chicago, Chicago, Ill., U.S.A.*
 Tarn, W. W., 2, *New Square, Lincoln's Inn, W.C.*
 Tatton, R. G.,
 Tayler, Miss Margaret, *Royal Holloway College, Egham.*
 †Taylor, Rev. Charles, D.D., *Master of St. John's College, Cambridge.*
 Thackeray, H. St. John, *Board of Education, Whitehall, S.W.*
 Thomas, M. T., 7, *Rysdale Terrace, Middlesbrough.*
 *Thompson, Sir E. M., K.C.B., D.C.L. (V.P.), *British Museum, W.C.*
 Thompson, F. E. (Council), 16, *Primrose Hill Road, N.W.*
 Thompson, Henry F. H., 35, *Wimpole Street, W.*
 †Thompson, Miss Anna, Boynton, *Thayer Academy, South Braintree, Mass., U.S.A.*
 Thomson, A. Douglas, Litt.D., *Greystonebank, Dumfries.*
 Thursfield, J. R., *Fryth, Great Berkhamstead.*
 Tilley, Arthur, *King's College, Cambridge.*
 Tod, Marcus N., *Sans Souci, The Park, Highgate, N.*
 *†Tozer, Rev. H. F., 18, *Norham Gardens, Oxford.*
 †Truell, H. P., F.R.C.S., *Clonmannon, Ashford, Co. Wicklow.*
 *†Tuckett, F. F., *Frenchay, near Bristol.*
 Tudeer, Dr. Emil, *Helsingfors, Finland.*
 †Turnbull, Mrs. Peveril, *Sandy-Brook Hall, Ashbourne.*
 Tyler, C. H., *Rossall School, Fleetwood.*
 Tylor, Prof. E. B., D.C.L., F.R.S., *The Museum House, Oxford.*
 Tyrrell, Prof. R. Y., Litt.D., D.C.L., LL.D. (V.P.), *Trinity College, Dublin.*
 Underhill, G. E., *Magdalen College, Oxford.*
 Upcott, L. E. *The College, Marlborough.*
 Valetta, J. N., 16, *Durham Terrace, Westbourne Gardens, W.*
 †Valieri, Octavius, 2, *Kensington Park Gardens, W.*
 †Vaughan, E. L., *Eton College, Windsor.*
 Verrall, A. W., Litt.D., *Trinity College, Cambridge.*
 Verrall, Mrs. A. W., *Selwyn Gardens, Cambridge.*
 Vincent, Sir Edgar, K.C.M.G., M.P., *Esher Place, Surrey.*
 †Viti de Marco, Marchesa di, *Pulazzo Orsini, Monte Savello, Rome.*
 Vlasto, Michel P., 12, *Allée des Capucins, Marseilles.*
 †Vlasto, T. A., *Bouevaine, Sefton Park, Liverpool.*
 Wace, A. J. B., *Calverton House, Stoney Stratford.*
 Wackernagel, Prof. Jacob, *The University, Göttingen, Germany.*

- Wade, Armigel de V., *St. Petoe Minor, St. Issey, Cornwall.*
- †Wagner, Henry, 13, *Half Moon Street, W.*
- †Waldstein, Charles, Ph.D., Litt.D. (V.P.), *King's College, Cambridge.*
- Walford, Mrs. Neville, *Sortridge, Horrabridge, South Devon.*
- Walker, Miss D. L., *Regent Lodge, Headingley, Leeds.*
- Walker, Rev. E. M., *Queen's College, Oxford.*
- Walker, Rev. F. A., D.D., *Dun Mallard, Shootup Hill, Brondesbury, N.W.*
- Walters, Henry Beauchamp (Council), *British Museum, W.C.*
- Ward, Arnold S., 25, *Grosvenor Place, S.W.*
- Ward, John, *Lenoxvale, Belfast.*
- Ward, T. H., 25, *Grosvenor Place, S.W.*
- †Warre, Rev. Edmond, D.D., *Eton College, Windsor.*
- Warren, T. H., *President of Magdalen College, Oxford.*
- Warren, E. P., *Lewes House, Lewes, Sussex.*
- Warren, Mrs. Fiske, 8, *Mount Vernon Place, Boston, U.S.A.*
- Waterfield, Rev. R., *The College, Cheltenham.*
- Waterhouse, Edwin, *Feldemore, near Dorking.*
- Waterhouse, Miss M. E., 59, *Edge Lane, Liverpool.*
- Waterlow, S. P. P., *British Embassy, Washington, U.S.A.*
- Watson, Mrs., *Burnopfield, Co. Durham*
- *Way, Rev. J. P., D.D., *The Hall, Rossall, Fleetwood.*
- †Weber, F. P., M.D., 19, *Harley Street, W.*
- Weber, Sir Hermann, M.D., 10, *Grosvenor Street, W.*
- Wedd, N., *King's College, Cambridge.*
- Weir, Miss Edith, 4, *Frognaal, Hampstead, N.W.*
- Welch, F. B., 8, *Brandram Road, Lee, Blackheath.*
- Weld-Blundell, Herbert, 100, *Holywell, Oxford.*
- †Weldon, The Right Rev. Bishop, *Little Cloisters, Westminster, S.W.*
- Wells, J., *Wadham College, Oxford.*
- Wells, R. Douglas, 171, *Queen's Gate, S.W.*
- Welsh, Miss M., *Newnham College, Cambridge.*
- Westlake, Prof. J., LL.D., *The River House, Chelsea Embankment, S.W.*
- Whately, A. P., 4, *Southwick Crescent, Hyde Park, W.*
- Wheeler, Benjamin Ide, *President of the University of California, Berkeley, Cal., U.S.A.*
- Wheeler, Prof. James R., Ph.D., *Columbia College, New York City, U.S.A.*
- Whibley, Leonard, *Pembroke College, Cambridge.*
- White, Miss R. E., *Newnham College, Cambridge.*
- White, Mrs. Andrew,
- White, Prof. J. Williams, Ph.D., LL.D., Litt.D., *Cambridge, Massachusetts, U.S.A.*
- White, J. N., *Rockland, Waterford.*
- †Whitehead, R. R., *Woodstock, Ulster Co., N.Y., U.S.A.*
- Wickham, The Very Rev. E. C., *The Deanery, Lincoln.*
- Wilkins, Rev. George, 36, *Trinity College, Dublin.*
- Wilkins, Prof. A. S., LL.D., Litt.D. (Council), *The Owens College, Manchester.*
- Wilkinson, Herbert, 10, *Orme Square, W.*
- Williams, T. Hudson, *University College, Bangor.*
- Wilson, Donald, *Wavertree, Beverley Road, Hull.*
- Wilson, H. C. B., *Crofton Hall, Crofton, near Wakefield.*
- †Winchester, the Right Rev. the Lord Bishop of, D.D., *Farnham Castle, Surrey.*
- Windley, Rev. H. C., *St. Chad's, Bensham, Gateshead-on-Tyne.*
- Winkworth, Mrs., *Holly Lodge, Campden Hill, W.*
- Wiseman, Rev. Henry John, *Scrivelby Rectory, Horncastle.*
- Wood, Rev. W. S., *Ufford Rectory, Stamford.*
- Woodhouse, Prof. W. J., *The University, Sydney, N.S.W.*
- †Woods, Rev. H. C., D.D., *Little Gaddesden Rectory, Berkhamstead.*
- Woodward, A. M., *Magdalen College, Oxford.*
- Woodward, Prof. W. H., *University College, Liverpool.*
- Wright, F. A., *Mill Hill School, Mill Hill, N.W.*

- Wright, Prof. John Henry, *Cambridge, Mass., U.S.A.*
 †Wright, W. Aldis, *Vice-Master, Trinity College, Cambridge.*
 †Wyndham, Rev. Francis M., *St. Mary of the Angels, Westmoreland Road, Bayswater, W.*
 †Wyse, W., *Trinity College, Cambridge.*
 Yates, Rev. S. A. Thompson, 43, *Phillimore Gardens, W.*
 Yorke, V. W., *Forthampton Court, Tewkesbury.*
 Young, Sir George, *Charity Commission, Whitehall, S.W.*
 Young, William Stewart, 20, *Montagu Square, W.*
 †Yule, Miss Amy F., *Tarradale House, Ross-shire, Scotland.*

LIST OF SUBSCRIBERS TO THE JOURNAL OF HELLENIC STUDIES.

- The University Library, *Aberdeen*.
 The University College of Wales, *Aberystwith*.
 The University Library, *Adelaide, S. Australia*.
 The Bibliothèque Nationale de Grèce, *Athens*.
 The American School of Archæology, *Athens*.
 The Carnegie Free Library, *Allgheeny, Pa., U.S.A.*
 The Amherst College Library, *Amherst, Mass., U.S.A.*
 The Andover Theological Seminary, *Andover, Mass., U.S.A.*
 The Peabody Institute, *Baltimore, U.S.A.*
 The Johns Hopkins Library, *Baltimore*.
 The Enoch Pratt Library, *Baltimore*.
 The University Library, *Berkeley, California*.
 The Royal Museum Library, *Berlin*.
 The Royal Library, *Berlin*.
 The Central Free Library, *Ratcliffe Place, Birmingham* (A. Capel Shaw, Esq.).
 The University of Birmingham, *Birmingham*.
 The Museum of Fine Arts, *Boston, Mass, U.S.A.*
 The Public Library, *Boston, U.S.A.*
 The Bowdoin College Library, *Brunswick, Maine, U.S.A.*
 The University Library, *Breslau*.
 The Brooklyn Institute of Arts and Sciences, *Brooklyn, U.S.A.*
 The Bryn Mawr College Library, *Bryn Mawr, Pa., U.S.A.*
 The Stanford University Library, *California, U.S.A.*
 The Library of Clifton College, *Clifton, Bristol*.
 The Antiken Cabinet des Ungar. National Museum, *Budapest*.
 †The University Library, *Cambridge*.
 The Library of Trinity College, *Cambridge*.
 The Library of Trinity Hall, *Cambridge*.
 The Library of St. John's College, *Cambridge*.
 The Library of King's College, *Cambridge*.
 The FitzWilliam Archaeological Museum, *Cambridge*.
 The Girton College Library, *Cambridge*.
 The Harvard College Library, *Cambridge, Mass., U.S.A.*
 The University College of South Wales, *Cardiff*.
 The University of Chicago Press, *Chicago, Illinois*.
 The Lewis Institute, *Chicago, Illinois*.
 The University Library, *Christiania, Norway*.
 The Library of Canterbury College, *Christchurch, N.Z.*
 The Public Library, *Cincinnati, U.S.A.*
 The University Library, *Cincinnati, U.S.A.*
 The University of Colorado, *Colorado, U.S.A.*
 The University Library of State of Missouri, *Columbia, Missouri, U.S.A.*
 The University of Czernowitz, *Czernowitz, Austria-Hungary*.
 The Public Library, *Detroit, U.S.A.*
 The Royal Museum of Casts, *Dresden*.
 †The Library of Trinity College, *Dublin*.
 The National Library of Ireland, *Dublin*.
 The King's Inns Library, *Dublin*.
 The Royal Irish Academy, *Dublin*.
 The University College, *Dundee*.
 The Durham Cathedral Library, *Durham*.
 †The Advocates' Library, *Edinburgh*.

- The Sellar and Goodhart Library, *University, Edinburgh*.
 The Royal Holloway College, *Egham, Surrey*.
 The Library of St. Mary's College, *Emmitsburg, Maryland, U.S.A.*
 The University Library, *Erlangen*.
 The University Library, *Freiburg im Baden* (Prof. Stemp).
 The Philologische Seminar, *Giessen*.
 The University Library, *Glasgow*.
 The Library of Charterhouse School, *Godulming*.
 The University Library, *Göttingen*.
 The Royal University Library, *Griefswald*.
 The University Library, *Halle*.
 The Dartmouth College Library, *Hanover, U.S.A.*
 The School Library, *Harrow, N.W.*
 The University Library, *Heidelberg* (Dr. Zangemeister).
 The Hull Public Libraries, *Hull*.
 The State University of Iowa, *Iowa, U.S.A.*
 The Cornell University Library, *Ithaca, N.Y.*
 The University Library, *Jena*.
 The Royal and University Library, *Königsberg*.
 The University of Kansas, *Lawrence, U.S.A.*
 The Leeds Library, *Commercial Street, Leeds*.
 The Public Library, *Leeds*.
 The University Library, 3, *Rue Jean Bart, Lille*.
 The Free Library, *Liverpool*.
 The Society of Antiquaries, *Burlington House, London, W.*
 †The British Museum, *London, W.C.*
 The Department of Greek and Roman Antiquities, *British Museum, London, W.C.*
 The Athenaeum Club, *Pall Mall, London, S.W.*
 The Burlington Fine Arts Club, *Savile Row, London, W.*
 The Chelsea Public Library, *Manresa Road, Chelsea, London, S.W.*
 The Library of St. Paul's School, *West Kensington, London, W.*
 The London Library, *St. James's Square, London, S.W.*
 The Reform Club, *Pall Mall, London, S.W.*
 The Royal Institution, *Albemarle Street, London, W.*
 The Royal Societies Club, 63, *St. James's Street, S.W.*
 The Library, *Westminster School, London, S.W.*
 The Oxford and Cambridge Club, c/o Messrs. Harrison and Sons, 59, *Pall Mall, W.*
 The Foreign Architectural Book Society (T. H. Watson, Esq.), 9, *Nottingham Place, W.*
 The Sion College Library, *Victoria Embankment, London, E.C.*
 The City Library, *Lowell, Mass. U.S.A.*
 The Bibliothèque Universitaire, *Palais St. Pierre, Lyons*.
 The Whitworth Institute, *Manchester*.
 The Chetham's Library, *Hunts Bank, Manchester*.
 The Grammar School, *Manchester*.
 The Owens College, *Manchester*.
 The Royal University Library, *Murzburg*.
 The Public Library, *Melbourne, Victoria* (c/o Messrs. Melville, Mullen and Co.).
 The Library of the University of Milan, *Milan*.
 The Königliche Paulinische Bibliothek, *Munster, I.W.*
 The Royal Library, *Munich*.
 The Archæological Seminary, *Munich*.
 The Free Public Library, *Newark, New Jersey, U.S.A.*
 The Library of Yale College, *Newhaven, U.S.A.*
 The Free Public Library, *Jersey City, New Jersey, U.S.A.*
 The Public Library, *New York, U.S.A.*
 The New York State Library, *Albany, New York*.
 The Library of Columbia University, *New York*.
 The Hamilton College Library, *Clinton, New York*.

- The Metropolitan Museum of Art, *New York*.
 The Library of the College of the City of New York, *New York*.
 †The Bodleian Library, *Oxford*.
 The Junior Library, *Corpus Christi College, Oxford*.
 The Library of All Souls College, *Oxford*.
 The Library of Worcester College, *Oxford*.
 The Library of Christ Church, *Oxford*.
 The Library of Exeter College, *Oxford*.
 The Library of St. John's College, *Oxford*.
 The Library of New College, *Oxford*.
 The Library of Oriel College, *Oxford*.
 The Library of Queen's College, *Oxford*.
 The Library of Trinity College, *Oxford*.
 The Library of Lincoln College, *Oxford*.
 The Union Society, *Oxford*.
 The University Galleries, *Oxford*.
 The Lake Erie College, *Painsville, Ohio, U.S.A.*
 The Bibliothèque de l'Institut de France, *Paris*.
 The Bibliothèque de l'Université de France, *Paris*.
 The Bibliothèque des Musées Nationaux, *Paris*.
 The Bibliothèque Nationale de Paris, *Paris*.
 The École Normale Supérieure, *Paris*.
 The Library Company, *Philadelphia*.
 The Library of the University of Pennsylvania, *Philadelphia, Pa., U.S.A.*
 The Carnegie Library, *Pittsburg, Pa., U.S.A.*
 The Vassar Library, *Poughkeepsie, N.Y.*
 The Archaeological Seminary, *The University, Prague* (Dr. Wilhelm Klein).
 The University Library, *Prague*.
 The Bibliothèque de l'Université, *Rennes*.
 The American School of Classical Studies, 5, *Via Vincenza, Rome*.
 The University Library, *St. Andrews, N.B.*
 The Mount Holyoke College, *South Hadley, Mass., U.S.A.*
 The Royal Library, *Stockholm*.
 The Archæological Museum, *The University, Strassburg* (Prof. Michaelis).
 The Imperial University and National Library, *Strassburg*.
 The Free Library, *Sydney, New South Wales*.
 The University Library, *Syracuse, New York*.
 The University Library, *Toronto*.
 The Universitäts Bibliothek, *Tübingen*.
 The Library of the University of Illinois, *Urbana, Illinois, U.S.A.*
 The Library of Congress, *Washington, U.S.A.*
 The Boys Library, *Eton College, Windsor*.
 The Bibliothèque Publique, *Winterthur* (Dr. Imhoof-Blumer).
 The Free Library, *Worcester, Mass., U.S.A.*
 The Williams College Library, *Williamstown, Mass., U.S.A.*
 The Kunstgeschichtliches Museum der Universität, *Würzburg*.

†Libraries claiming copies under the Copyright Act.

LIST OF JOURNALS, &c., RECEIVED IN EXCHANGE FOR THE
JOURNAL OF HELLENIC STUDIES.

- American Journal of Archæology (Miss Mary H. Buckingham, *Wellesley Hills, Mass., U.S.A.*).
 Analecta Bollandiana, Société des Bollandistes, 12, *Rue des Ursulines, Bruxelles*.
 Annales of Cairo Museum, *Cairo*.
 Annual of the British School at *Athens*.
 Bulletin de Correspondance Hellénique (published by the French School at *Athens*).
 Bullettino della Commissione Archeologica Comunale di Roma (Prof. Gatti, Museo Capitolino, *Rome*).
 Ephemeris Archaeologica, *Athens*.
 Jahrbuch of German Imperial Archaeological Institute, Corneliusstrasse No. 2, II., *Berlin*.
 Jahreshefte des Österreichischen Archäologischen Institutes, Türkenstrasse, 4, *Vienna*.
 Journal of the Anthropological Institute, *Hanover Square*.
 Journal of the Royal Institute of British Architects, 9, *Conduit Street, W.*
 Journal International d'Archéologie Numismatique (M. J. N. Svoronos, Musée National, *Athens*).
 Mélanges d'Histoire et d'Archéologie, published by the French School at *Rome*.
 Mittheilungen of the German Imperial Archaeological Institute at *Athens*.
 Mittheilungen of the German Imperial Archaeological Institute at *Rome*.
 Mnemosyne c/o Mr. E. J. Brill, *Leiden, Holland*.
 Neue Jahrbücher (c/o Dr. J. Ilberg), *Rosenthalgasse 3, II., Leipzig*.
 Numismatic Chronicle, 22, *Albemarle Street*.
 Philologus. Zeitschrift für das klassische Altertum (c/o Dietrich'sche Verlags-Buchhandlung, *Göttingen*).
 Praktika of the Athenian Archaeological Society, *Athens*.
 Proceedings of the Hellenic Philological Syllogos, *Constantinople*.
 Publications of the Imperial Archaeological Commission, *Sé. Petersburg*.
 Revue Archéologique, *Paris* (per M. Georges Perrot, 45, *rue de l'Université*).
 Revue des Études Grecques, Publication Trimestrielle de l'Association pour l'Encouragement des Études Grecques en France, *Paris*.
 Transactions of the Cambridge Philological Society and Journal of Philology.

SESSION 1902-1903.

THE First General Meeting was held in the rooms of the Society of Antiquaries at Burlington House on Tuesday, Nov. 4, 1902, Mr. Douglas Freshfield, Treasurer, in the chair.

Mr. Jay Hambidge read a paper on 'The Natural Basis of Form in Greek Art,' with especial reference to the Parthenon. The investigation of the symmetrical forms found in Nature, both organic and inorganic, led to the discovery that (allowing for modifications of growth) a certain principle of proportion is rigidly persistent throughout. The examination of the proportions of crystals, and of the proportions and outlines of living forms, such as the flower of the grape, diatoms, radiolaria, butterflies (these being but a few instances out of a very large number), shows that the proportions and curves involved in these forms may be analysed by (1) a primary series of circles which stand to each other in a binary relation ($1 : 2 : 4 : 8$, &c.), combined with (2) a secondary series of circles derived by using as radii the sides of the triangles, squares, pentagons, or hexagons inscribed in the circles of the primary series. The proportions of symmetrical natural objects can all be expressed in terms of circles standing to each other in this relation, and the curved outlines of Nature can be analysed by a series of osculating circles which are similarly related. The same binary system, it was shown, can be used to analyse the proportions and curves of the Parthenon, down to the minutest detail. The use of this principle involves no abstruse knowledge of mathematics, but requires only the simplest geometrical methods. On this system, with a string and a stick and a sanded floor, proportions can be worked out which, if expressed arithmetically, would involve incommensurable quantities. The inference is that the Greek architect used some simple geometrical system of this kind, and refined his curves by means of circles related to each other on the system already described. He was thus unconsciously following the principle on which Nature builds up her symmetrical forms; and the investigation of the proportions and outlines of numerous other works of art, such as Greek vases, shows that the works of the best period always approximate most closely to the same principle. The Parthenon is only the most striking and complete instance of the fact that the beautiful in art involves adherence (presumably unconscious) to the same law as underlies the beautiful in Nature.—A discussion followed, in which Mr. Penrose, Sir John Evans,

Mr. H. H. Statham, Mr. G. F. Hill and Prof. W. C. F. Anderson took part: and Mr. Hambidge replied to the points raised.

The Second General Meeting was held at Burlington House on Feb. 24, 1903, Prof. Percy Gardner, V.P., in the chair.

Miss H. L. Lorimer read a paper on 'The Ancient Greek Cart' (*J.H.S.* Vol. xxiii. p. 132). The paper was illustrated by lantern-slides.—A discussion followed, in which the Chairman, Prof. Ernest Gardner, Mr. A. G. Bather, and others took part.

The Third General Meeting was held at Burlington House on May 5, 1903, Sir R. Jebb, President, in the chair.

Dr. Waldstein read a paper on the bronze found off Cerigo. Two years ago, in the *Monthly Review*, Dr. Waldstein published an article in which, on the evidence of photographs of the upper part of the bronze found in the sea off Cerigo, he considered that the statue probably represented a Hermes Paregoros and was of the Praxitelean style of sculpture. Since then the statue had been completely restored by the French sculptor M. André, and M. Cavvadias had kindly sent a number of different views of the whole statue. In the light of this new evidence Dr. Waldstein reconsidered the question of the subject as well as the style of the statue. The front view, showing the two middle fingers of the upraised hand bent forward on the same level, made his interpretation of this attitude as that of an orator bidding silence before he began to speak less secure. On the other hand, it seemed to him impossible that the statue represented an athlete about to throw—or who had just thrown—a ball. Nor was it likely that the sculptor would have finished off the hand in all details and then inserted a round object. It would be much easier to cast the hand holding the object at once. Still the round object might have been of some other material, such as an apple, and thus it was not impossible that the figure might have held an apple as Paris, or the hair of the head of Medusa (Perseus), or the purse of Hermes. On the whole, it seemed to him most probable that the hand was merely raised in gesture, and that the statue represented Hermes as an orator. As to the style, we must remember that Pliny records that *par haesitatio est* whether two separate groups were by Scopas or Praxiteles; and it cannot thus appear extraordinary that, after he had been able to study the several photographs of the fully restored statue, he should now change from Praxiteles to Scopas. On the other hand, not having examined the statue itself, he could not be positive as to its merit in all details, and whether we might attribute the work to the hand of the master himself or his followers. But when we compare the statue with works of Praxiteles, such as the 'Hermes' (which the lecturer did throughout by means of lantern-slides), we at once see that the proportions of the body are not those of the 'Hermes,' with its longer torso and the different

modelling of the muscles. It is in this respect nearer to the 'Apoxyomenos' of Lysippus, only that here again the longer legs, the greater slenderness, and the smaller head, of which the ancients speak as distinctive characteristics of that artist, distinguish it from the Cerigo bronze. The lecturer then proceeded to show the difference in the treatment of the heads of the bronze and the Praxitelean and Lysippean statues, and demonstrated how the distinctive characteristics of Scopasian heads, as shown by Dr. Graef and others, and as maintained by himself for many years, were to be found in a marked manner in this Cerigo statue. He threw on the screen heads mentioned by Dr. Graef in various museums and added to them some bronzes at Naples, at Florence, and elsewhere, and especially dwelt upon the characteristic treatment of the eye and forehead, and the peculiar way the hair seemed to rise out of the forehead. Lastly he showed how in the 'Hercules' of Lansdowne House—in the body and especially in the head—the same Scopasian characteristics were manifest, and that the famous intaglio of Hercules by Cnecius in the British Museum was a replica of the same 'Hercules,' all manifesting the same style as the bronze from Cerigo.—A discussion followed, in which Dr. Rendall, Mr. G. F. Hill, Mr. Stannus, and others took part.

The Annual Meeting took place at Burlington House on June 30, 1903, Sir Richard Jebb, President, in the chair.

The Hon. Secretary (Mr. George Macmillan) read the following Report on the part of the Council :—

The Council have pleasure in reporting that the 24th Session of the Society has been one of healthy progress in every department. The meetings at Burlington House have been well attended and, as will appear, the Society has been active in publication, and in assisting exploration.

A further grant of £100 has been made to the Cretan Exploration Fund by the help of which Mr. Evans has continued his brilliant discoveries at Cnossus, while help has also been given by that Fund to excavations on the site of Palaikastro conducted by Mr. Bosanquet as Director of the British School at Athens. An important article by Mr. Duncan Mackenzie on the Pottery of Cnossus has appeared in the last number (xxiii. 1) of the Society's Journal and full accounts of recent discoveries at Cnossus, Praesus, and Palaikastro appear in the new number of the Annual of the British School at Athens which has just been issued.

The annual grant of £100 to the British School at Athens has been renewed for a further period of three years, and members will be glad to know that the School has never been in a healthier condition than now. As the Society now makes a small grant to the British School at Rome members will be interested to hear that the School, though still needing financial support, is doing good work. A first volume of Papers was published last year and has been well received.

A grant of £25 has been made to Mr. D. G. Hogarth to assist him in exploring Greek sites in the northern portion of the Egyptian Delta. It is hoped that some account of his results may appear in the Journal.

The contents of the twenty-second volume of the Journal are sufficient evidence of the value of the Society's work in this field. In connexion with the Journal two important steps have been taken during the past session. In the first place, the Editorial Committee, in co-operation with the Consultative Committee, have drawn up a scheme for the transliteration of Greek names in the Journal, with a view to securing a uniform system for the guidance of contributors. This scheme, which was the result of careful deliberation, is somewhat of the nature of a compromise, but it is hoped that it will prove satisfactory in working. In the second place it has been decided to add a bibliographical section to the Journal, containing short accounts by experts of the most important publications in every branch of Hellenic study.

The Facsimile of the Codex Venetus of Aristophanes, referred to in last year's Report, has now been issued at the joint cost of the Society and of the Archaeological Institute of America. Two hundred copies were issued at the price of £6 6s. bound in morocco, or £6 in a portfolio. Nearly half the Edition has been taken up in Europe and America, and it is hoped that the remainder will be subscribed for in due course so that the sum of about £200 which has been advanced by the Society may be recovered. It is generally admitted that the Facsimile, with the admirable palaeographical Introduction by Mr. T. W. Allen, is thoroughly creditable to the two Societies concerned.

Another publication for which the Society has made itself responsible, that of the volume recording the results of the excavations undertaken by the British School at Athens at Phylakopi in the island of Melos, has made steady progress during the past session and will probably appear before the end of the year. The heaviest part of the expense, that of the illustrations, amounting to about £160, has already been met, and the cost of the letterpress will be comparatively small. As stated in previous Reports, this volume will be issued to members at about cost price, and it is earnestly hoped that enough copies will be bought by members and at a higher price by the outside public to secure the Society against financial loss.

Another item of expenditure which has been incurred during the past year has been the printing of the Catalogue of the Society's Library. Unfortunately the expense—about £75—has been considerably greater than was anticipated, and had it been foreseen the Council might have decided to make a small charge for it even to members. The existence of such a Catalogue, however, should add much to the usefulness of the Library, and it is hoped that there may be a small sale for it outside the Society. To members elected after the current Session the Catalogue will be supplied at 2s. net. The price to outsiders has been fixed at 3s. net.

An important change in the management of the Library has been

made during the past year. Miss Johnson, who had done good service as Assistant Librarian for seven years, resigned her post at the end of the year, and the Council, on the recommendation of the Library Committee, decided to engage at a higher salary the services of a trained archaeologist, with some practical knowledge of photography and lantern slides. Steps were taken to advertise the post at the Universities and elsewhere, and several good candidates presented themselves. In the end a member of the Society, Mr. J. ff. Baker-Penoyre, with quite exceptional qualifications, was appointed and has held office, as Librarian, since Christmas. Members who use the Library must already have felt the great advantage of being able to appeal to a Librarian with competent knowledge of the contents of the Library, and of the use of Lantern Slides.

Library Report.

During the past year 250 visits are recorded to have been made to the Library, compared with 343 in 1901-2, and 236 in 1900-1. The number of members using the Library was 65 compared with 66 and 81. The number of volumes borrowed was 211 compared with 247 and 199.

In the course of the spring a thorough revision of the arrangement of the Library was undertaken. Some parts had become seriously congested, and the classification was imperfect. Additional shelves have now been added, the books have been spaced out, as far as the size of the room allows, the classification has been improved and subject labels have been fixed on the shelves. It is estimated that there is now space for four years' growth.

The issue of the catalogue, to which reference is made elsewhere, should increase the usefulness of the Library to members at a distance. It is hoped that the improved shelf arrangement will facilitate research at the Library itself.

Three new periodicals have been added to the list, namely the *Harvard Studies*, the *Papers of the British School at Rome*, and *Archiv für Stenographie*. Ninety-one new books have been added, among which the following deserve special mention :—

Aristophanes. Facsimile of Codex Venetus, issued by the Hellenic Society in co-operation with the Archaeological Institute of America.

Burlington Fine Arts Club. Catalogue of objects of Greek Ceramic Art (1888). Illustrated copy on Japanese paper.

Kaibel. Inscriptiones Graecae Siciliae et Italiae.

Wilcken. Griechische Ostraka aus Aegypten und Nubien.

Blouet. L'Expédition Scientifique de Morée.

The collection of Classical authors has been further strengthened by the addition of twenty-five Teubner texts.

Gifts of books have been received from the Archaeological Institute of America, the Syndics of the Cambridge University Press, the Delegates of the Clarendon Press, the Delegates of the Bodleian Library, the Trustees of the British Museum, the University of Colorado, and the University of Missouri. The following authors have presented copies of their works : Mr. A. S. Arbanitopoulos, Mr. F. S. Benson, Prof. S. H. Butcher, Mr. N. P. Eleutheriades, Prof. E. A. Gardner, Dr. E. Petersen, Mr. A. H. Smith, and Prof. U. von Wilamowitz-Möllendorf. Miscellaneous books have been presented by Mr. G. F. Hill, Mr. Talfourd Ely, the Hon. Treasurer, and the Librarian.

Photographic Collection.

In the course of the past six months the whole of the Photographic collection has been thoroughly revised by the newly appointed Librarian, and considerably enlarged by donations and occasional purchases : and several improvements have been introduced in its administrative routine, which it is believed will increase still further its usefulness to the members of the Society.

A. *The Reference Collection of Photographs*, a large part of which has been accumulated in bound volumes, the contents of which frequently overlapped one another, has now been entirely transferred to uniform card mounts, which are arranged, like the library card-catalogue, in uniform compartments, and are consequently easy of access. It is further intended to reclassify the whole collection in order of subjects, in the course of the vacation, and thus effect further economy of time and trouble in the use of a collection which is probably already one of the largest photographic records of Hellenic monuments and sites. A comprehensive index of the whole collection is in preparation, and sections of it are made available for consultation in the Library as soon as they are ready.

B. *The Loan Collection of Photographs* has been allowed to develop more slowly, in proportion as time and expenditure seemed to be more profitably concentrated on the Collection of Slides (see C. below). Duplicate photographs are, however, set aside as occasion offers, and are put at the disposal of lecturers and students in the same manner as are the slides and the library books.

C. *The Loan Collection of Slides* still grows rapidly, and is at last becoming more widely known. During the past year more than 1,300 slides have been lent to members ; and more than 500 have been made for sale from the Society's negatives. A number of fresh slides and negatives have been added to the collection ; a number of the less adequate slides are being replaced by slides made from the finer or more instructive negatives which have been placed in recent years at the Society's disposal, and greater attention is being paid than was possible formerly to the remedy of the wear and tear which results from more frequent use. In spite,

however, of these fresh causes of expenditure, the collection still pays its way. In fact, the only serious obstacle to very wide extension of its usefulness is the want of an adequate printed catalogue. The stock of separate copies of the original catalogue of 1897 and of the supplementary list of 1900 is practically exhausted ; a second supplementary list issued last autumn in Vol. xxii of the *Journal* did little more than report recent accessions, and reformulate the whole contents of one or two sections where the size of the supplement exceeded that of the original list ; and the inconvenience of having to consult three separate lists in different volumes of the *Journal* is a serious one. The question of how these evils can best be remedied is now under consideration.

D. *The Collection of Photographic Negatives* has grown in a similar proportion : and it has been found possible at last to compile out of the numerous separate negative-lists which have been accumulating since the collection was instituted a single negative-register of between 4,000 and 5,000 negatives.

In the compilation of this register, in the complete revision of the whole of the Society's material, and, above all, in maintaining undisturbed the daily routine of the supply and loan of slides during the period of investigation and readjustment, the Society owes a special debt of gratitude to its Librarian, Mr. Baker-Penoyre, who has given up a large part of his leisure to clear off arrears and to start the collection as from September next on a more simple and expansible system.

The Society has been officially represented at two important functions during the past year. In October the President and Hon. Secretary attended the celebration at Oxford of the Tercentenary of the Bodleian Library, and presented a Latin address which was printed in the last volume of the *Journal*. In April the President represented the Society at the Historical Congress in Rome.

Among losses sustained by death during the past year special mention is due to Mr. F. C. Penrose, the eminent architect, who had served on the Council since the foundation of the Society, and had for many years held the office of Vice-President. All who have had the pleasure of working with Mr. Penrose during these twenty-four years will recognise how much the Society owes to his constant interest in all the objects with which it is concerned. We have also to record the lamented death of Mr. Stephen Spring Rice, C.B., one of the Auditors of the Society. Mr. George Lillie Craik was provisionally appointed in his place and is to-day nominated for election.

In June of next year the Society will have completed the twenty-fifth year of its existence, the inaugural meeting having been held at Freemasons' Tavern on June 19, 1879. The Council are of opinion that the occasion should be celebrated, and have already begun to consider the best steps to be taken in the matter. Full particulars will be announced later on.

Finance.

The Balance Sheet shows the present financial position of the Society. Ordinary receipts during the year were £1079, against £1022 during the financial year 1901-2. The receipts from subscriptions, including arrears, amount to £659, against £641, and receipts from libraries, and for the purchase of back volumes £202, against £185. Entrance fees to the value of £50 have been received. Life subscriptions amounting to £94, donations £3, and for lantern slides £26 have also been received.

The ordinary expenditure for the year amounts to £812 against £665. Payments for rent £80, insurance £15, are the same as in the preceding year; the salaries owing to the appointment of a new Librarian have risen to £68. Sundry printing, postage, and stationery accounts show an increase of £30; the cost of purchases for the Library shows £89 against £82 and of lantern slides £35 against £17. The net cost of the *Journal*, Vol. XXII, amounts to £454 against £367. The usual grant of £100 was made to the British School at Athens, £25 to the British School at Rome, £25 to Mr. Hogarth for the Egyptian Delta, and £100 to the Cretan Exploration Fund. The balance carried forward at the close of the year under review amounts to £56 against £409 at the end of the previous financial year. There is also a credit balance of £17 on the Aristophanes Facsimile account.

The expenditure on the facsimile of the Codex Venetus of Aristophanes is shown in a separate account. The amount advanced by the Society is £210. £160 has been paid towards the cost of the Phylakopi volume.

Eighty-five new members have been elected during the year, while 27 have been lost by death or resignation. The present total of subscribing members is 819, and of honorary members 25.

Seven new libraries have joined the list of subscribers, making the number at the present time 150, or with the five public libraries 155.

Conclusion.

In conclusion, the Council feel that the Society may congratulate itself on a Session of varied activity and substantial progress. The comparatively small balance in hand is accounted for by unusual expenditure, but some part of this will certainly be recovered by sales of the Aristophanes Facsimile and of the volume on Phylakopi. There has been a very marked increase in the number of members and it may be suggested that special efforts should be made during the coming year to bring in still more. There could be no more appropriate way of celebrating the Society's twenty-fifth year than by raising the number of members from 800 to 1,000. The Society might then enter upon a new epoch of existence in a

thoroughly sound financial condition, and so be able to meet fully the increasing demands made upon its resources for the promotion of Hellenic Study in all its branches.

In moving the adoption of the Report the President said :—

In moving the adoption of the Report which has just been read, it is in accordance with our custom that I should say a few words on some of the more noteworthy incidents relating to Hellenic studies which have occurred since our last Annual Meeting. Such a retrospect can, of course, make no claim to completeness ; and the notice given to each topic must needs be very brief. But a rapid survey, however imperfect, is perhaps not wholly useless, if it serves as a reminder of the varied work which has been in progress.

It is a remarkable fact that each of the more important metrical texts found in Egypt during the last few years illustrates a poetical type of which no example was previously known to us. The mimes of Herondas stand alone in their class. So also do these six odes of Bacchylides, forming the second division of the recovered series, which in later antiquity passed under the general name of dithyrambs. A third instance is now supplied by a long fragment from a poem by Timotheus of Miletus, who flourished about 400 B.C. This poem was of the very old kind called *νόμος*, nome ; a term which originally meant, probably, a custom, use, or mode in singing. The nome was a sacred solo in honour of some god, especially of Apollo. Terpander of Lesbos, in the early part of the seventh century, who developed the music of the cithara, was famous for his *κιθααρφδικοί νόμοι*—solos, chiefly, but not exclusively, in hexameter verse, sung to the cithara. Timotheus, who, like Terpander, was primarily a musician, gave a new popularity to the citharodic nome, which, in his hands, took a more artificial and also a more popular form, connected with his innovations in music. The papyrus containing this fragment was discovered near Memphis early in 1902. The objects found along with it are referred by archaeologists to a date not much later than 350 B.C. The writing of the papyrus itself may, in Mr. Kenyon's judgment, be referred to the same period ; it cannot in any case be later than the early part of the third century. This papyrus is therefore the oldest extant Greek MS. ; being clearly of an earlier type than the Flinders Petrie *Phaedo* and *Antiope*, which had previously stood first in age. As edited by Prof. von Wilamowitz-Möllendorf, the text consists of 253 verses, forming the middle part and the end of a citharodic nome. Unfortunately there is no trace of the musical notation. The metre is lyric, in short verses and free rhythms, evidently determined by the music. A certain analogy to the general metrical character may be traced in some lyrics of Euripides.

The poem describes a naval victory of Greeks over Persians, which can be no other than that of Salamis ; there are references to the Persian king as surveying the whole scene. The fragment belongs, then, to one

of the most celebrated nomes of Timotheus—that entitled the *Persae*, which, as Plutarch shows, was popular at the time when Agesilaus commanded in Asia Minor, and remained in favour down at least to the days of Philopoemen. While the form of the whole is lyric, the central part of the nome is epic in treatment, being a narrative of the sea-fight, interspersed, in epic fashion, with speeches. Thus an Asiatic chief, who is drowning, cries aloud to the cruel sea—‘Bold as thou art, thou once hadst thy neck in a hempen noose’ (ἐμ πῆδα... λινοδέτῳ),—alluding to the bridge of boats which Xerxes threw across the Hellespont;—and then, with his dying breath, predicts a final triumph for his master. A very curious feature of this nome is the introduction of a distinctly comic element. After the battle, a Phrygian, taken prisoner by the Greeks, pleads for his life in bad Greek,—‘interweaving the speech of Hellas,’ as the poet says, ‘with that of Asia.’ Among other solecisms, he says ἔρχω instead of ἔρχομαι, and makes Artemis masculine, calling her ἐμὸς μέγας θεός. This quaint counterpart to the Scythian in Aristophanes shows how far Timotheus was prepared to go in appealing to the popular taste. The old nome, as Terpaner knew it, was not only religious, but solemn.

As to the diction of the fragment, it is the traditional lyric language in a degenerate phase, marked by extreme artificialism. It was Timotheus who described a shield as ‘the cup of Ares,’ and metaphors of that nature occur; also many uncouth compound words. One further point of interest should be noted. The fragment illustrates the structure of a νόμος. We knew before that the three principal parts were called ἀρχή, ὀμφαλός and σφραγίς. Here the ἀρχή is wanting; the central part, the ὀμφαλός, is the story of the battle; and the σφραγίς consists of the last thirty-eight verses, in which the poet speaks of himself by name. He sets his seal on his work, marking it as his own. ‘Apollo be gracious to me,’ he says; ‘the great Spartan folk reproach me with dishonouring the old music by new fashions of song.’ And then he explains, in effect, that his quarrel is only with the *bad* exponents of the old school (μουσοπαιολύμας). He, Timotheus of Miletus, is in the true line of Orpheus and Terpaner. But Terpaner had only ten strings to his cithara, and he has eleven.

The German editor conjectures that Timotheus sang this νόμος to the cithara, about 397 B.C., at the Panionia, the festival of the twelve Ionian cities, held on the promontory of Mycale. The editor seems to be wrong, however, in supposing that it was a solo throughout. Probably the performance of the central portion was, in part at least, choral. This would suit, for instance, the verses describing the triumphal dances (χορείαις) of the Greeks after their victory (vv. 213 f.): and, according to tradition, the most distinctive innovation of Timotheus was to make the nome choral instead of simply monodic. Sparta was then supreme in Hellas, and it was the interest of the Asiatic Greeks to encourage the Spartans in their warfare with the Persian satraps. Not a single proper name occurs in the narrative of the sea-fight. Salamis is tacitly treated as a Hellenic rather than an Athenian victory. It cannot be said that the

new fragment has much literary or poetical value. But for the history of the later classical poetry it is indeed a curious document.

Reference has been made in the Report to the collotype Facsimile of the Codex Venetus (Marcianus 474) of Aristophanes, published jointly by the Archaeological Institute of America and our Society. It may be well to add a brief statement of the reasons why the Codex Venetus was chosen for reproduction in preference to the Codex Ravennas. The Venice MS. dates from about the middle of the eleventh century, and contains only seven plays (*Plutus*, *Clouds*, *Frogs*, *Knights*, *Birds*, *Peace*, *Wasps*). The Ravenna MS. is somewhat older; it contains all the eleven plays; and it has hitherto been generally regarded as the best authority. But its text has twice been collated and published; and an accurate edition of its Scholia is also available. The Venice MS., on the other hand, has received comparatively slight attention. That was one reason for selecting it. But another and yet stronger ground was the great importance of the old scholia contained in the Venice MS. It supplies the fullest and most trustworthy text now extant of comments on Aristophanes by the Alexandrian scholars. In comparison with the Venetian scholia, those of the codex Ravennas are meagre and incoherent. Some fresh light for the textual criticism of Aristophanes may be hoped for from a closer study of the scholia in the Venetus, which the facsimile has now made easier for specialists. We are much indebted in this matter to Prof. John Williams White, of Harvard, who, as President of the Archaeological Institute of America, represented it on our Joint Committee. To his initiative the enterprise was primarily due. We are debtors also to Mr. T. W. Allen, for the palaeographical account of the codex which is prefixed to the facsimile. He shows how the work of writing the manuscript was divided among four scribes: B took the beginning, C the middle, and D the end; while A, the supervisor or διορθωτής, intervened more or less everywhere, and sometimes wrote a few pages continuously. It is also pointed out how the scholia relating to one page of text are constantly straying over to the next page. The scribe, or reviser, has often to warn the reader of this, by such remarks as *ζήτει εἰς τὸ ὀπισθεν*, 'look back.' As Mr. Allen observes, the earliest owner to whom the Venetus can be traced is Cardinal Bessarion, with whose library it came to the Venetian Republic. It received its present binding in 1722.

Another example of co-operation between England and America is furnished by the volume of the Tebtunis papyri, edited by Messrs. Grenfell, Hunt, and Smyly. The University of California defrayed the cost of the expedition, and is the owner of the papyri. The volume is published alike for that University and for the Graeco-Roman branch of the Egypt Exploration Fund. The papyri contained in this volume came from the cemetery of crocodile mummies. It was a singular fate, even for writings analogous to blue-books, to be used as wrappings for embalmed crocodiles. The date of the texts printed in this volume ranges from about 150 to 60 B.C. Among a few literary pieces, there is a passage of the

Iliad (ii. 95—210), with some critical signs. But the contents are mainly official documents. These serve to illustrate many details of Ptolemaic economics; among others, the various classes of land-tenure in the Fayoum, and the value at that period of silver relatively to copper, which seems to have been something like 30 to 1. Messrs. Grenfell and Hunt have also been making fresh finds at Oxyrhynchus, and it must soon be hoped that further funds will be subscribed which may enable them to complete their excavations there.

With regard to the progress of Hellenic archaeology during the past year, the centre of interest has certainly been Crete. There is reason, I believe, to hope that at a special meeting of this Society in the autumn Mr. Arthur Evans will give us an account of his most recent discoveries, illustrated by photographs and drawings. In view of that prospect, even the attempt at a bare summary would be inopportune now; we shall look forward to having the latest discoveries at Cnossus described by the explorer himself. Besides those excavations, noticed in the Report, which the British School has conducted at Palaikastro, another Cretan 'find' deserves mention,—that of a fine palace discovered by the Italians at Agia Triadha, where some large talents of copper have been found, like those represented on the tomb of Rekhinara at the Egyptian Thebes.

Outside of Crete, interesting results have been obtained at several places in the Hellenic lands. At Orchomenus in Boeotia Professor Furtwängler has unearthed a prehistoric palace with frescoes, vases and inscriptions, in characters said to be similar to some of those found at Cnossus. Dr. Dörpfeld, seeking in Leucas for the house of Odysseus or his prototype, is said to have come upon a large prehistoric settlement.

On several other sites, Hellenic remains of a later age have been disclosed. At Samos the Greek Archaeological Society has been engaged in excavating the Heraeum. The temple of Poseidon and Amphitrite has been brought to light at Tenos. At Cos, Dr. Herzog has found the temple of Asclepius. It may be recollected that, in the fourth mime of Herondas, some women of Cos bring gifts to Asclepius at his temple, and converse admiringly on the objects of art which they see around them. They speak of certain statues and allude to the inscriptions on their bases. Some of these statue-bases have been found. The site of Tralles has yielded important sculptures of the Hellenistic period. At Pergamum a newly-found inscription shows that the great altar there was built by Attalus II. This list might be enlarged, but the results thus briefly noted will suffice to show at how many points the year's work has been going forward. One other discovery should be mentioned—that of the temple of the Pythian Apollo at Argos. The name of that city reminds us that Dr. Charles Waldstein and his colleagues of the American School are to be congratulated on the recent publication of the first of the two stately volumes embodying the results of their exploration of the Argive Heraeum, in 1892—1895. This first volume is devoted to a General Introduction,

Geology, Architecture, Marble Statuary, and Inscriptions. The second volume of this important work is to follow at no long interval. Another publication of the past year which may be noticed is the work on 'Ancient Athens' by Professor Ernest Gardner. While mainly topographical in treatment, it regards topography from the historical point of view. Early Attic art generally, and that of the sepulchral reliefs in particular, are included in the scope of the volume, which should be welcome to students.

In looking back on those events of the year which concern our studies, a word may perhaps be said as to an incident which has attracted considerable attention in France, and which is not devoid of instruction : I refer to the lively controversy regarding the so-called tiara of Saitapharnes. The official enquiry, which was entrusted to M. Clermont Ganneau, has established the following facts. The tiara was elaborated, with the help of some really ancient pieces, by a living artist at Odessa. For the Scythian subjects which he represented on the tiara, his authority was a work by two Russian scholars on the antiquities of Southern Russia. For the Greek subjects he consulted a German work entitled 'Picture-Atlas for the Study of World-History.' This book accounts for some of the most peculiar figures which adorn the tiara. One of these, purporting to be a wind-god, was taken from a page of the book which has the following headline : 'Gods of light and of healing—Winds—Seasons.' From the position of the figure on the page, the fabricator rashly inferred that it represented a wind. His own statement is that he made the tiara in good faith, and that it was ordered as a present for a Professor of Archaeology who was about to celebrate his jubilee.

It is a matter of common, though perhaps vague, knowledge to most persons who care for such things, that the private art collections of this country are rich in treasures from ancient Greece. But the astonishing wealth of such collections has never, perhaps, been more strikingly manifested than in the exhibition of Greek Art at the Burlington Fine Arts Club, which is to remain open till the end of July. To mention only a few of the objects which it contains, there are some of the Lansdowne Marbles, there is the Fragment of the Parthenon frieze lately found in an Essex garden, there is an early bronze equestrian statuette, once in the Forman collection—there is the Leconfield head of Aphrodite, the Pierpoint Morgan statuette of Eros, the Ludwig Mond portrait of Menander (?)—to say nothing of numerous bronzes, terra-cottas, vases, gems and coins. It is a great boon for students of Greek antiquity that this wonderful collection should have been brought together from so many homes, by the generosity of the owners and the enterprise of the organisers.

A Society devoted to the promotion of Hellenic Studies may naturally welcome another event which has occurred since our last annual meeting. A Charter has been granted to a British Academy ; one of its four sections is concerned with History and Archaeology, while another is devoted to Philology. As has lately been indicated with sufficient clearness, the object of the new institution is not to be ornamental, but to do

work. Before, however, it can do work such as that in which foreign Academies find their most useful function, it must receive, as they receive, some measure of financial aid from the State. That such aid may ere long be granted, will, I do not doubt, be the wish and the hope of this Society.

In concluding these remarks, I would ask leave to touch upon a subject to which the Report has already referred,—the loss which this Society has sustained by the death of Francis Cranmer Penrose. As one who enjoyed the privilege of his friendship for many years, and as his colleague in more than one relation, I cannot refrain to-day from adding a brief personal tribute, however inadequate, to that which has already been rendered in the name of our Council as a whole. The delicacy of his perception, the truth of his instinct in all matters relating to that noble art which he had made his life-study, were attributes which only an expert in that art could fully appreciate. To a larger circle, they were in some measure disclosed by his great work on the Parthenon. But all who were brought into relations with him came to know that the gifts of the artist, fine as these were, derived an enhanced charm, and a higher value, from the qualities of the man. He had true and rare dignity of character, and sweetness of character also ; he was full of courage and of manly confidence when there was anything to be done ; at the same time he was the most modest of men, and the most absolutely unselfish, never thinking for a moment of recognition or reward, but altogether bent, in his simple and whole-hearted way, on using all his powers to the best purpose for the work which he had in hand. He did much for the advancement of science in his chosen field, but he gave nothing better to those who were associated with him than the knowledge of a beautiful nature, and the example of a worthy life. They will always hold his memory in respect and affection.

The adoption of the Report was seconded by Prof. Fairclough, and carried unanimously.—The former President and Vice-Presidents were re-elected, and Prof. Ernest Gardner and Dr. C. Waldstein were elected Vice-Presidents. Prof. J. B. Bury and Dr. A. S. Hunt were elected to vacancies on the Council.—Mr. Hogarth gave some account of his explorations in the Egyptian Delta and at Naucratis.

	£	s.	d.	£	s.	d.
To Sales of Journal, July 1, 1901, to June 30, 1902	120	16	9			
" Advertisements in Journal	9	10	3			
" Balance, to Cash Account	130	7	0			
	454	4	2			
	<u>£584 11 2</u>					
By Vol. XXII., Parts I. and II. Printing (including carriage)				374	11	2
" " Plates				32	17	0
" " Drawing and Engraving				71	14	8
" " Paper				55	8	4
" " Editing				50	0	0
				<u>£584 11 2</u>		

CASH ACCOUNT.

	£	s.	d.	£	s.	d.
To Balance at 31st May, 1902	325	4	10			
" Petty Cash	14	4	0			
" Members' Subscriptions, 1902—1903	645	15	0	409	8	10
" " Arrears	12	14	2			
" " Life Subscriptions				658	9	2
" " Entrance Fees				94	10	0
" Library Subscriptions, 1902—1903				50	8	0
" Back Volumes of Journal				153	6	0
" Donations, F. D. Mocatta, Esq.				48	11	6
" Dividends on New South Wales 3½ per cent. Stock—Oct. 1, 1902				3	3	0
" " April 1, 1903	18	12	1			
" " Corporation of Nottingham 3 per cent.—Nov. 1, 1902	18	12	1			
" " May 1, 1903	2	6	3			
" " Library Account—Sales of Duplicates, Fines, &c.	2	6	3			
" " Lantern Slides Account	41	16	8			
" " Royalties on Sale of Photographs	0	15	6			
	25	16	7			
	1	17	6			
	<u>£1,488 2 9</u>					
To Balance at Bankers, 31st May, 1903				£56	1	7

ARISTOPHANES FACSIMILE FUND.

	£	s.	d.	£	s.	d.
To Balance at 31st May, 1902	131	0	6			
" Cash advanced by the Society for the Promotion of Hellenic Studies	210	0	0			
" Sale of Copies to 31st May, 1903	300	18	0			
	<u>£641 18 6</u>					
Balance brought forward				£17	5	0

We have examined this account, compared it with the vouchers and bankers' book, and find it correct.

25th June, 1903.

DOUGLAS W. FRESHFIELD, *Hon. Treasurer.*

ARTHUR J. BUTLER, } *Auditors.*
 GEORGE LILLIE CRAIK, }

A comparison with the receipts and expenditure of the last ten years is furnished by the following tables:—

ANALYSIS OF ANNUAL RECEIPTS FOR THE YEARS ENDING :—

	31 May, 1894.	31 May, 1895.	31 May, 1896.	31 May, 1897.	31 May, 1898.	31 May, 1899.	31 May, 1900.	31 May, 1901.	31 May, 1902.	31 May, 1903.
Subscriptions	£ 671	£ 678	£ 645	£ 617	£ 613	£ 598	£ 634	£ 636	£ 628	£ 646
Arrears	44	14	9	4	13	18	9	10	13	13
Life Compositions	79	50	63	15	...	32	63	78	78	94
Libraries and Back Vols.	186	122	117	126	118	122	163	179	185	202
Entrance Fees .....	...	...	...	...	...	...	33	45	52	50
Dividends	43	43	43	43	43	43	43	42	42	42
Special Receipts—										
Mr. D. G. Hogarth (Alex- andria Grant Refunded)	...	...	30	...	...	...	...	...	...	...
Loan and sale of Lantern Slides	4	2	7	5	...	4	3	30	19	26
Clichés .....	...	...	...	3	...	...	...	...	...	...
Library Receipts .....	...	...	...	...	...	...	2	2	2	1
Royalty on and Sales of Photographs	2	1	1	...	2	...	2	1	...	2
Donations—										
F. D. Mocatta, Esq. ....	...	...	...	...	...	3	3	3	3	3
E. H. Egerton, Esq.	5	...	...	...	...	...	...	...	...	...
H. G. Hart, Esq. ....	...	...	...	...	...	...	5	...	...	...
Miss E. C. Stevenson .....	...	...	...	...	...	...	...	11	...	...
Library—W. Arkwright, Esq.	...	...	...	3	...	...	...	...	...	...
	1,034	910	915	816	789	820	960	1,037	1,022	1,079
Balance from preceding year ...	259	214	169	340	360	201	61	131	252	409
	1,293	1,124	1,084	1,156	1,149	1,021	1,021	1,168	1,274	1,488

ANALYSIS OF ANNUAL EXPENDITURE FOR THE YEARS ENDING :—

	31 May, 1894.	31 May, 1895.	31 May, 1896.	31 May, 1897.	31 May, 1898.	31 May, 1899.	31 May, 1900.	31 May, 1901.	31 May, 1902.	31 May, 1903.
Rent	£ 73	£ 80	£ 80	£ 80	£ 80	£ 80	£ 80	£ 80	£ 80	£ 80
Insurance	11	15	15	15	15	15	15	15	15	15
Salaries	49	49	47	52	50	60	60	60	60	69
Library	75	96	39	94	93	61	73	74	82	89
Sundry Printing, Postage, and Stationery	49	49	46	29	45	32	58	61	41	72
Lantern Slides Account .....	...	...	...	...	24	...	13	29	17	35
Photographs Account .....	...	...	...	...	...	26	1	15	...	...
Cost of Journal (less sales)	475	441	394	346	516	536	390	382	367	454
Grants	185	225	100	180	125	150	200	200	200	250
Investments	158	...	...	...	...	...	...	...	...	...
Advanced on Account of—										
Facsimile of the Codex Venetus of Aristophanes.	...	...	...	...	...	...	...	...	...	210
“Excavations at Phylakopi”	...	...	...	...	...	...	...	...	...	156
Commission and Postage per Bank .....	...	...	...	...	...	...	...	...	...	...
Egypt Exploration Fund—1,100 copies of Mr. Hogarth's Report	...	...	23	...	...	...	...	...	3	2
Photo Enlargements, Albums,	4	...	...	...	...	...	...	...	...	...
	1,079	955	744	796	948	960	890	916	865	1,432
Balance	214	169	340	360	201	61	131	252	409	56
	1,293	1,124	1,084	1,156	1,149	1,021	1,021	1,168	1,274	1,488

FIRST LIST OF
BOOKS AND PAMPHLETS
ADDED TO THE
LIBRARY OF THE SOCIETY
SINCE THE PUBLICATION OF THE CATALOGUE.
MARCH—OCTOBER, 1903

- Abbott (G. F.)** Macedonian Folklore. 8vo. Cambridge. 1903.
- Aeschylus.** Persae. Ed. A. Sidgwick. 8vo. Oxford. 1903.
- Septem contra Thebas. Ed. A. Sidgwick.
8vo. Oxford. 1903.
- Anstice (J.)** Selections from the Choric Poetry of the Greek dramatic
Writers. 8vo. London. 1832.
- Aristotle.** Ethics. Ed. A. Grant. 2 vols. 8vo. London. 1874.
- Bérard (V.)** Les Phéniciens et L'Odyssée. Tome I.
8vo. Paris. 1902.
- British Museum.**
Department of Coins and Medals.
Catalogue of Greek Coins in the British Museum.
8vo. Parthia. By W. Wroth. 1903.
- Burlington Fine Arts Club.** Exhibition of Ancient Greek Art.
4to. London. 1903.
- Chandler (R.)** Travels in Asia Minor. 4to. Oxford. 1775.
- Coleridge (H. N.)** Introduction to the Study of the Greek Classic
Poets. 8vo. London. 1846.
- Eleutheriades (N. P.)** ἡ ἀκίνητος ιδιοκτησία ἐν Τουρκίᾳ.
8vo. Athens. 1903.
- Freshfield (E.)** A Memorandum on the Byzantine Capitals placed in
the Church of the Wisdom of God, Lower Kingswood.
Fol. 1903.
- Furtwaengler (A.)** Das Tropaion von Adamklissi.
4to. Munich. 1903.
- G — (E. E.)** The Makers of Hellas. 8vo. London. 1903.
- Greenidge (A. H. J.)** and A. M. Clay. Sources for Roman History
B.C. 133–70. 8vo. Oxford. 1903.

- Hardie (W. R.)** Lectures on Classical Subjects.
8vo. London. 1903.
- Lear (E.)** Views in the Seven Ionian Islands.
Fol. London. 1863.
- Millingen (J.)** Peintures Antiques de Vases Grecs de la Collection
de Sir John Coghill, Bart. Fol. Rome. 1817.
- Niese (B.)** Geschichte der Griechischen und Makedonischen Staaten
seit der Schlacht bei Chaeronea. Part III. Handbücher
der alten Geschichte. 2nd Series. 8vo. Gotha. 1903.
- Pallis (A.)** A few notes on the Gospels according to St. Mark and
St. Matthew. 8vo. Liverpool. 1903.
- Petersen (E.)** Trajans Dakische Kriege. II. Der zweite Krieg.
8vo. Leipsic. 1903.
- Plato.** Opera. Ed. J. Burnet. Vol. III. [Script. Class. Bibl.
Oxon]. 8vo. Oxford. 1903.
- Thirlwall (C.)** History of Greece. 8 vols. 8vo. London. 1855.
- Ward (J.)** Greek Coins and their Parent Cities.
8vo. London. 1902.
- Wood (J. T.)** Discoveries at Ephesus. 8vo. London. 1877.

NOTICE TO CONTRIBUTORS.

THE Council of the Hellenic Society having decided that it is desirable for a common system of transliteration of Greek words to be adopted in the *Journal of Hellenic Studies*, the following scheme has been drawn up by the Acting Editorial Committee in conjunction with the Consultative Editorial Committee, and has received the approval of the Council.

In consideration of the literary traditions of English scholarship, the scheme is of the nature of a compromise, and in most cases considerable latitude of usage is to be allowed.

(1) All Greek proper names should be transliterated into the Latin alphabet according to the practice of educated Romans of the Augustan age. Thus κ should be represented by *c*, the vowels and diphthongs *υ*, *αι*, *οι*, *ου* by *y*, *ae*, *oe*, and *u* respectively, final *-ος* and *-ον* by *-us* and *-um*, and *-πος* by *-er*.

But in the case of the diphthong *ει*, it is felt that *ei* is more suitable than *e* or *i*, although in names like *Laodicea*, *Alexandria*, where they are consecrated by usage, *e* or *i* should be preserved: also words ending in *-ειον* must be represented by *-eum*.

A certain amount of discretion must be allowed in using the *o* terminations, especially where the Latin usage itself varies or prefers the *o* form, as *Delos*. Similarly Latin usage should be followed as far as possible in *-e* and *-a* terminations, e.g., *Priene*, *Smyrna*. In some of the more obscure names ending in *-πος*, as *Λέαρρος*, *-er* should be avoided, as likely to lead to confusion. The Greek form *-ον* is to be preferred to *-o* for names like *Dion*, *Hieron*, except in a name so common as *Apollo*, where it would be pedantic.

Names which have acquired a definite English form, such as *Corinth*, *Athens*, should of course not be otherwise represented. It is hardly necessary to point out that forms like *Hercules*, *Mercury*, *Minerva*, should not be used for *Heracles*, *Hermes*, and *Athena*.

(2) Although names of the gods should be transliterated in the same way as other proper names, names of personifications and epithets such as *Nike*, *Homonoia*, *Hyakinthios*, should fall under § 4.

(3) In no case should accents, especially the circumflex, be written over vowels to show quantity.

(4) In the case of Greek words other than proper names, used as names of personifications or technical terms, the Greek form should be transliterated letter for letter, *k* being used for *κ*, *ch* for *χ*, but *y* and *u* being substituted for *υ* and *ου*, which are misleading in English, e.g., *Nike*, *apoxyomenos*, *diadumenos*, *rhyton*.

This rule should not be rigidly enforced in the case of Greek words in common English use, such as *aegis*, *symposium*. It is also necessary to preserve the use of *ou* for *ου* in a certain number of words in which it has become almost universal, such as *boule*, *gerousia*.

(5) The Acting Editorial Committee are authorised to correct all MSS. and proofs in accordance with this scheme, except in the case of a special protest from a contributor. All contributors, therefore, who object on principle to the system approved by the Council, are requested to inform the Editors of the fact when forwarding contributions to the Journal.

In addition to the above system of transliteration, contributors to the *Journal of Hellenic Studies* are requested, so far as possible, to adhere to the following conventions :—

Quotations from Ancient and Modern Authorities.

Names of authors should not be underlined; titles of books, articles, periodicals, or other collective publications should be underlined (for italics). If the title of an article is quoted as well as the publication in which it is contained, the latter should be bracketed. Thus:

Six, *Jahrb.* xviii. 1903, p. 34,

or—

Six, *Protophones* (*Jahrb.* xviii. 1903), p. 34.

But as a rule the shorter form of citation is to be preferred.

The number of the edition, when necessary, should be indicated by a small figure above the line; e.g. Dittenb. *Syll.*² 123.

Titles of Periodical and Collective Publications.

The following abbreviations are suggested, as already in more or less general use. In other cases, no abbreviation which is not readily identified should be employed.

- A.-E.M.* = Archäologisch-epigraphische Mittheilungen.
Ann. d. I. = Annali dell' Instituto.
Arch. Anz. = Archäologischer Anzeiger (Beiblatt zum Jahrbuch).
Arch. Zeit. = Archäologische Zeitung.
Ath. Mitth. = Mittheilungen des Deutschen Arch. Inst., Athenische Abtheilung.
Baumeister = Baumeister, Denkmäler des klassischen Altertums.
B.C.H. = Bulletin de Correspondance Hellénique.
Berl. Vas. = Furtwängler, Beschreibung der Vasensammlung zu Berlin.
B.M. Bronzes = British Museum Catalogue of Bronzes.
B.M.C. = British Museum Catalogue of Greek Coins.
B.M. Inscr. = Greek Inscriptions in the British Museum.
B.M. Vases = British Museum Catalogue of Vases, 1893, etc.
B.S.A. = Annual of the British School at Athens.
Bull. d. I. = Bullettino dell' Instituto.
C.I.G. = Corpus Inscriptionum Graecarum.
C.I.L. = Corpus Inscriptionum Latinarum.
Cl. Rev. = Classical Review.
C.R. Acad. Inscr. = Comptes Rendus de l'Académie des Inscriptions.
Dar.-Sagl. = Daremberg-Saglio, Dictionnaire des Antiquités.
Dittenb. Syll. = Dittenberger, Sylloge Inscriptionum Graecarum.
Ἐφ. Ἀρχ. = Ἐφημερίς Ἀρχαιολογική.
G.D.I. = Collitz, Sammlung der Griechischen Dialekt-Inschriften.
Gerh. A.V. = Gerhard, Auserlesene Vasenbilder.
G.G.A. = Göttingische Gelehrte Anzeigen.
I.G. = Inscriptiones Graecae.¹
I.G.A. = Röhl, Inscriptiones Graecae antiquissimae.
Jahrb. = Jahrbuch des Deutschen Archäologischen Instituts.
Jahresh. = Jahreshefte des Oesterreichischen Archäologischen Institutes.
J.H.S. = Journal of Hellenic Studies.
Le Bas-Wadd. = Le Bas-Waddington, Voyage Archéologique.
Michel = Michel, Recueil d'Inscriptions grecques.
Mon. d. I. = Monumenti dell' Instituto.
Müller-Wies. = Müller-Wieseler, Denkmäler der alten Kunst.
Mus. Marbles = Collection of Ancient Marbles in the British Museum.
Neue Jahrb. kl. Alt. = Neue Jahrbücher für das klassische Altertum.
Neue Jahrb. Phil. = Neue Jahrbücher für Philologie.

¹ The attention of contributors is called to the fact that the titles of the volumes of the second issue of the Corpus of Greek Inscriptions, published by the Prussian Academy, have now been changed, as follows:—

- | | | | |
|-------------|------|---|---|
| <i>I.G.</i> | I. | = | Inscr. Atticae anno Euclidis vetustiores. |
| „ | II. | = | „ „ aetatis quae est inter Eucl. ann. et Augusti tempora. |
| „ | III. | = | „ „ aetatis Romanae. |
| „ | IV. | = | „ Argolidis. |
| „ | VII. | = | „ Megaridis et Boeotiae. |
| „ | IX. | = | „ Graeciae Septentrionalis. |
| „ | XII. | = | „ insul. Maris Aegaei praeter Delum. |
| „ | XIV. | = | „ Italiae et Siciliae. |

Num. Chr. = Numismatic Chronicle.

Num. Zeit. = Numismatische Zeitschrift.

Pauly-Wissowa = Pauly-Wissowa, Real-Encyclopädie der classischen Altertumswissenschaft.

Philol. = Philologus.

Rev. Arch. = Revue Archéologique.

Rev. Ét. Gr. = Revue des Études Grecques.

Rev. Num. = Revue Numismatique.

Rev. Philol. = Revue de Philologie.

Rh. Mus. = Rheinisches Museum.

Röm. Mitth. = Mittheilungen des Deutschen Archäologischen Instituts, Römische Abtheilung.

Roscher = Roscher, Lexicon der Mythologie.

T.A.M. = Tituli Asiae Minoris.

Z. f. N. = Zeitschrift für Numismatik.

Transliteration of Inscriptions.

- [] Square brackets to indicate additions, *i.e.* a lacuna filled by conjecture.
- () Curved brackets to indicate alterations, *i.e.* (1) the resolution of an abbreviation or symbol; (2) letters misrepresented by the engraver; (3) letters wrongly omitted by the engraver; (4) mistakes of the copyist.
- < > Angular brackets to indicate omissions, *i.e.* to enclose superfluous letters appearing on the original.
- . . . Dots to represent an unfilled lacuna when the exact number of missing letters is known.
- - - Dashes for the same purpose, when the number of missing letters is not known.

Uncertain letters should have dots under them.

Where the original has iota adscript, it should be reproduced in that form; otherwise it should be supplied as subscript.

The aspirate, if it appears in the original, should be represented by a special sign, ^h.

Quotations from MSS. and Literary Texts.

The same conventions should be employed for this purpose as for inscriptions, with the following *important exceptions* :—

- () Curved brackets to indicate only the resolution of an abbreviation or symbol.
- [[]] Double square brackets to enclose superfluous letters appearing on the original.
- < > Angular brackets to enclose letters supplying an omission in the original.

The Editors desire to impress upon contributors the necessity of clearly and accurately indicating accents and breathings, as the neglect of this precaution adds very considerably to the cost of production of the *Journal*.



EARLY SELEUCID PORTRAITS



1



2



3



4



5



6



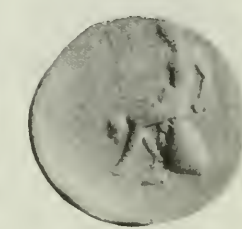
7



8



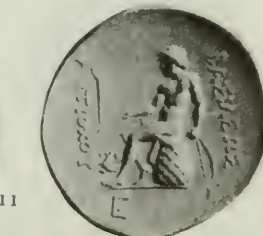
9



10



11

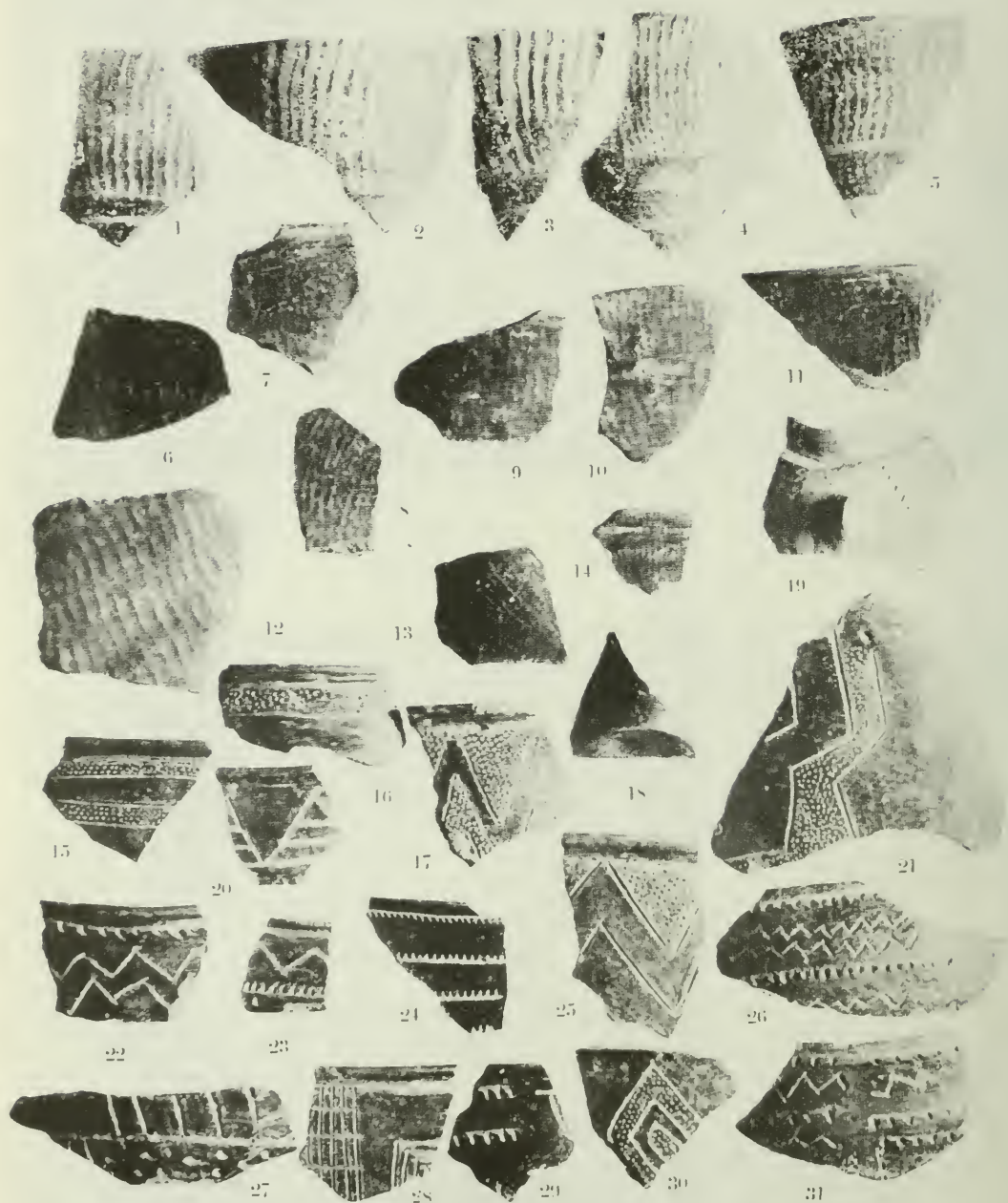


12





THE OLDFIELD HEAD OF APOLLO

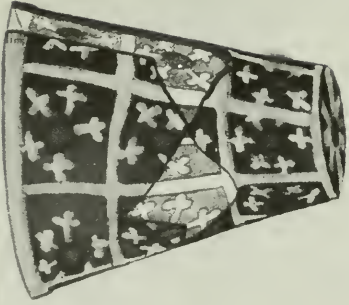


NECLITHIC WARE FROM KNOSSOS.

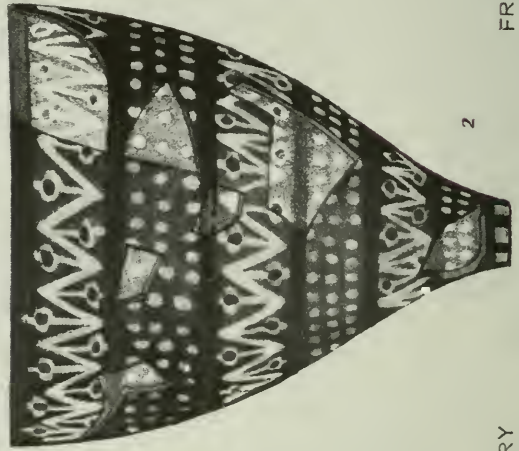
FROM KNOSSOS.

MINOAN CUPS





1



2



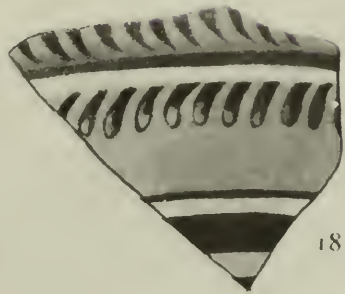
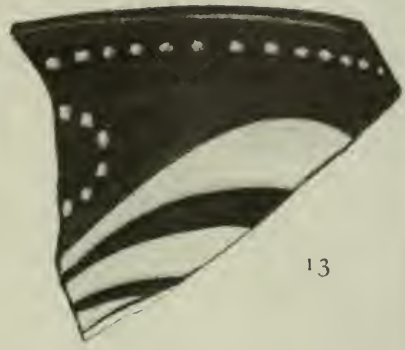
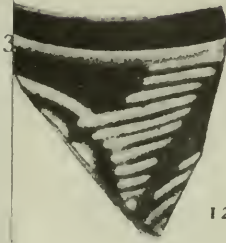
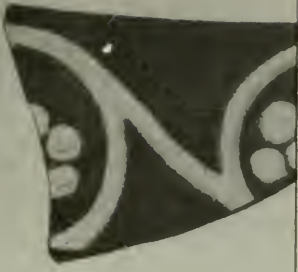
3



4

FROM KNOSSOS.

MINOAN POTTERY





1



2



8



11



9



3



4



10



12



13



6



7



14



15



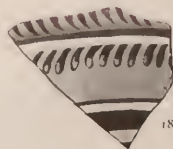
16



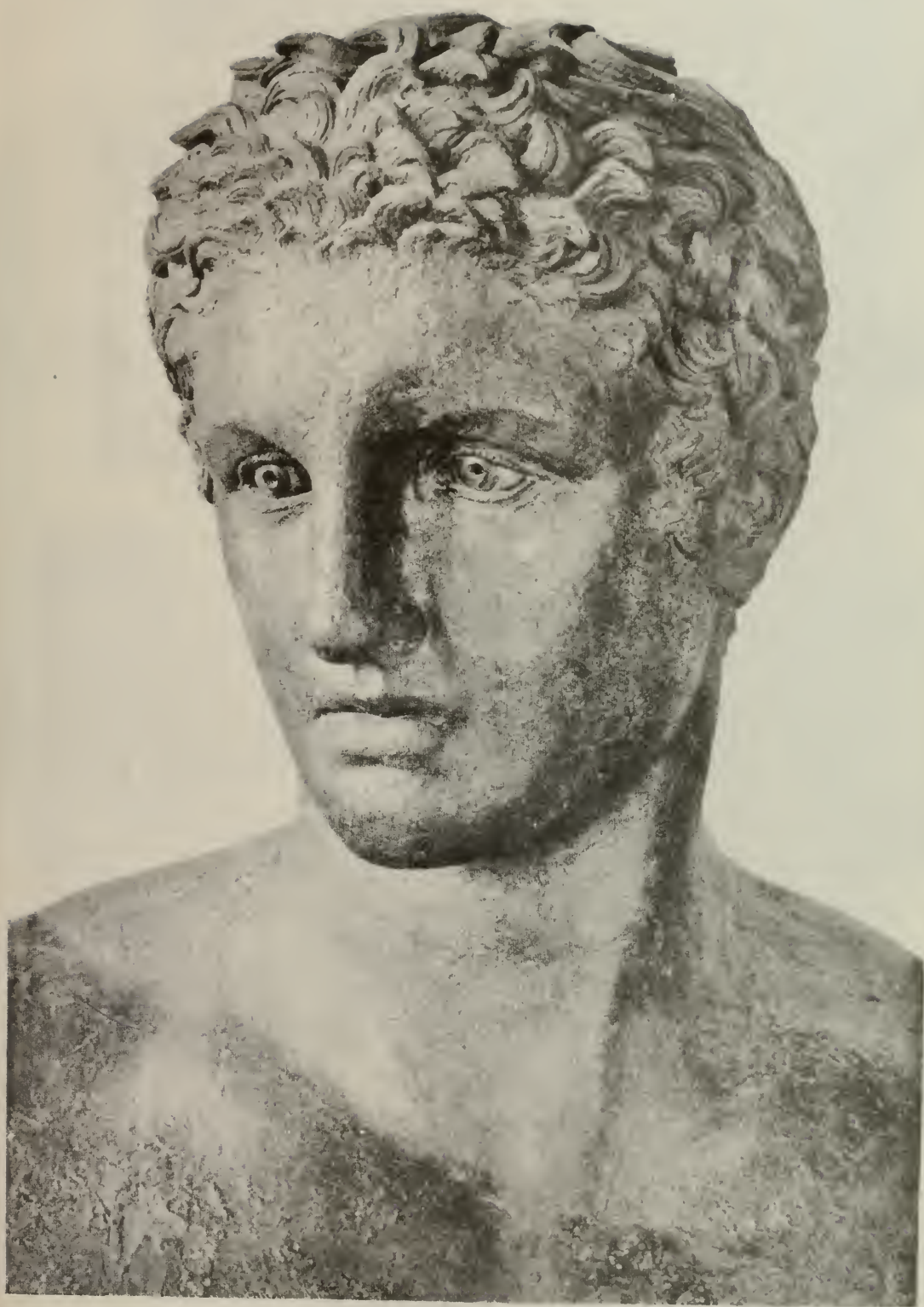
5



17



18



HEAD OF BRONZE FROM CERIGOTTO.

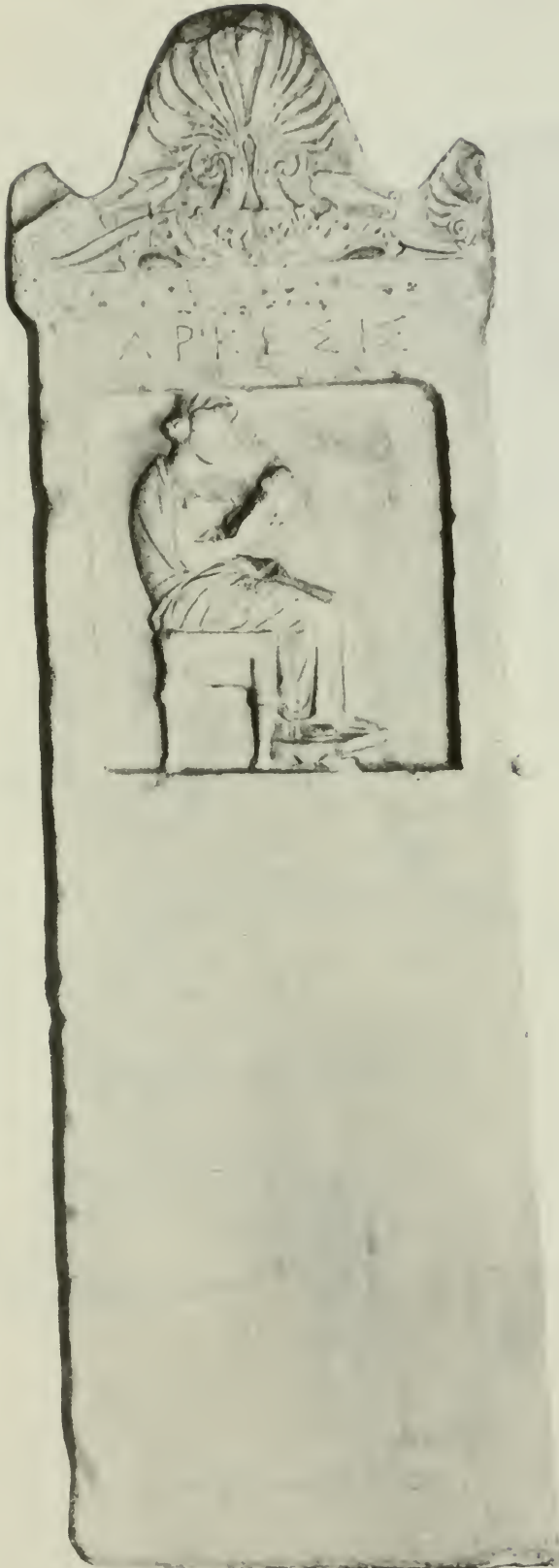


BRONZE STATUE FROM CERIGOTTO.

[illegible]



STELE OF MELISTO AND EPIGENES.



STELE OF ARKESIS.



STELE OF AN ACTOR.

GETTY CENTER LIBRARY

THE J. PAUL GETTY MUSEUM LIBRARY

JAN 22 1979



3 3125 00098 3722

